Staff Report

PLANNING DIVISION
COMMUNITY & NEIGHBORHOODS

To: Administrative Hearing Officer, Salt Lake City Planning Division

From: Lauren Parisi, Principal Planner – (801) 535-7226 – lauren.parisi@slcgov.com

Date: November 15, 2018

Re: PLNPCM2018-00585 – Conditional Use for Utility Mounted Antennas

CONDITIONAL USE

PROPERTY ADDRESS: 922 S. Emery Street
PARCEL ID: 15-11-157-009
MASTER PLAN: Westside Master Plan
ZONING DISTRICT: R-1-5,000 Single-Family Residential

REQUEST: Kalab Cox, representing T-Mobile, is requesting conditional use approval in order to modify an existing antenna array and replace six (6) antennas with three (3) antennas that are located on a utility pole in the public right-of-way at approximately 922 S. Emery Street zoned R-1-5,0000: Single-Family Residential. The modified antenna array, including the mounting structure, will have a diameter of approximately 39 inches. Section 21A.40.090.E.2.g of Salt Lake City's Zoning Code allows antenna arrays with a diameter of 30 inches or less to be mounted on utility poles by right, but those with a larger diameter must be reviewed as a conditional use.

RECOMMENDATION: Based on the information in this staff report, planning staff recommends that the Administrative Hearing Officer approve the proposed conditional use for an antenna array on an existing utility pole with a diameter greater than 30 inches subject to the conditions listed below.

1. Any modifications to the approved plans after the issuance of a building permit must be specifically requested by the applicant and approved by the Planning Division prior to execution.
2. Applicant shall comply with all other department/division requirements.

ATTACHMENTS:

- **A.** Vicinity Map
- **B.** Site Photographs
- **C.** Application Materials
- **D.** Antenna Zoning Standards
- **E.** Conditional Use Standards
- **F.** Public Process and Comments
- **G.** Department Comments

PROJECT DESCRIPTION: The request is to modify an existing antenna array and replace 6 antennas with 3 antennas *total* that are located on a utility pole in the public right-of-way at approximately 922 S. Emery Street zoned R-1-5,000: Single-Family Residential. The modified antenna array, including the mounting structure, will have a diameter of approximately 39 inches. Section 21A.40.090.E.2.g of Salt Lake City's Zoning Code allows antenna arrays with a diameter of 30 inches or less to be mounted on utility poles by right, but those with a larger diameter must be reviewed as a conditional use. Additionally, the utility pole will remain the same height at approximately 60 feet tall and no new ground mounted utility equipment is being installed. The antennas themselves are approximately 56.6" tall and 12.9" wide.

The existing antenna array with 6 antennas is noncomplying because it has a diameter over 30 inches (measuring 80 inches or 6 feet 8 inches) and did not receive conditional use approval. The community raised some concern that this array appeared larger than the allowable 30 inches thought to be approved per the initial building permit and; therefore, Zoning Enforcement Case #HAZ2018-01633 was opened on June 1, 2018 to look into the matter. It was confirmed that the array that was constructed is larger than 30 inches in diameter (as illustrated on Sheet A-2 of the applicant's plan set) and the applicant was informed that they would need to obtain conditional use approve in order to close out the zoning enforcement case.

Because of this concern, the applicant has worked to reduce the diameter of the array in addition to the number of antennas and remote radio units (RRUs) proposed. The initial array that was submitted for conditional use approval on July 25, 2018, had 3 antennas and 3 RRUs with a diameter of 45 inches. Since then, the array has been further modified to include 3 antennas without any RRUs and a diameter of 39 inches. The applicant attempted to get the diameter down 30 inches allowable without conditional use approval, but explained that "due to the new and ever-changing technology that goes into wireless antennas, [they] were not able to do so." Again, the existing array is 80 inches in diameter with 6 antennas.

Project Location:
The subject site is located just south of 900 South and West of 900 West as well as I-15. Again, the site is zoned R-1-5,000: Single-Family Residential and a single-family home sits on the associated property at 922 S. Emery Street that houses the ground mounted utility equipment. As seen on the zoning map, the properties across the street are zoned R-2: Single and Two-Family Residential and the larger elementary school property to the south is zoned PL: Public Lands. The "9 line" trail also runs just to the south of the subject site. All of the surrounding land uses are as follows:

North – Residential Property
South – 9 line trail/Parkview Elementary School
East – Residential Property
West – Vacant Lot

KEY CONSIDERATIONS:
The key considerations listed below have been identified through the analysis of the project, neighbor input and department review comments.

Consideration 1: Community Concern

It has been indicated by City reviewers as well as the Housing and Zoning Enforcement Division that the neighboring community had concerns that the antenna array was constructed to be larger and had more antennas than what was approved by the building permit, which ended up being the case. However, the applicant has worked to rectify this noncompliance by proposing an antenna array significantly smaller than what currently exists. The proposed array will have a diameter of 39 inches instead of 80 inches and 3 antennas instead of 6.

It should also be noted that since the initial early engagement letters were sent out to all property owners and tenants within 300 feet of the site on August 1st, 2018, no comments or concerns have been received. Additionally, the Community Councils did not send comments or request that staff and the applicant come and present at their regular meetings. That said, it could be inferred that part of the concern was related to the antennas proximity to an elementary school. Again, if the array had a diameter of 30 inches or less, it would be permitted by right without any special approval. Antenna arrays on utility poles are located throughout the City in both commercial and residential zoning districts.

Consideration 2: Compliance with Conditional Use Standards

As the Section 21A.54.080 of the Zoning Ordinance describes:

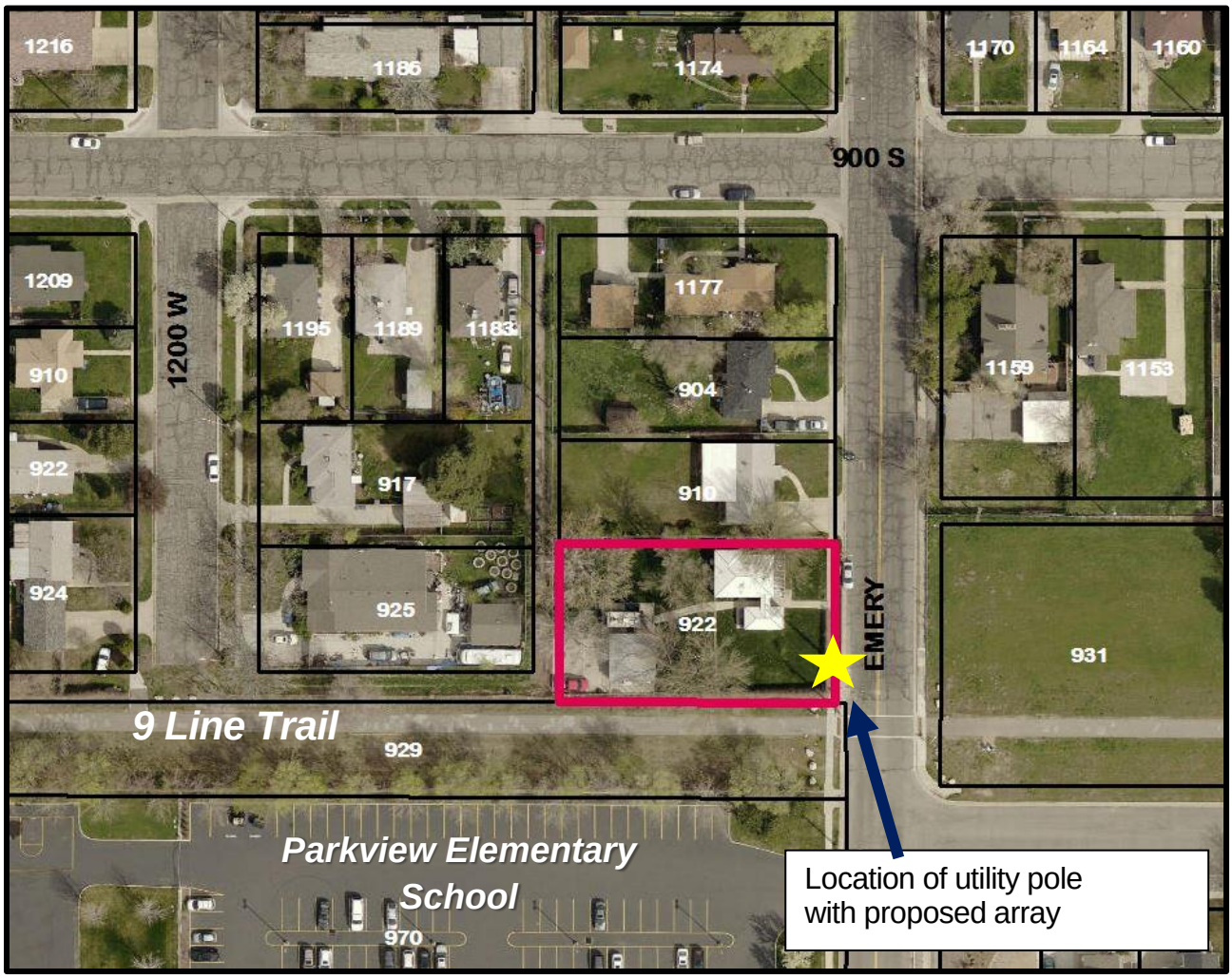
A conditional use shall be approved if reasonable conditions are proposed, or can be imposed, to mitigate the reasonably anticipated detrimental effects of the proposed use in accordance with applicable standards set forth in this section. If the reasonably anticipated detrimental effects of a proposed conditional use cannot be substantially mitigated by the proposal or the imposition of reasonable conditions to achieve compliance with applicable standards, the conditional use shall be denied.

Detailed under Attachment E of this report, the proposal generally meets the conditional use standards. The applicant has worked to downsize the antenna array in order to mitigate its visual impact and ensure that it's structurally sound. Staff does not feel that other conditions, besides compliance with all other department/division requirements, need to be applied in order to approve the request.

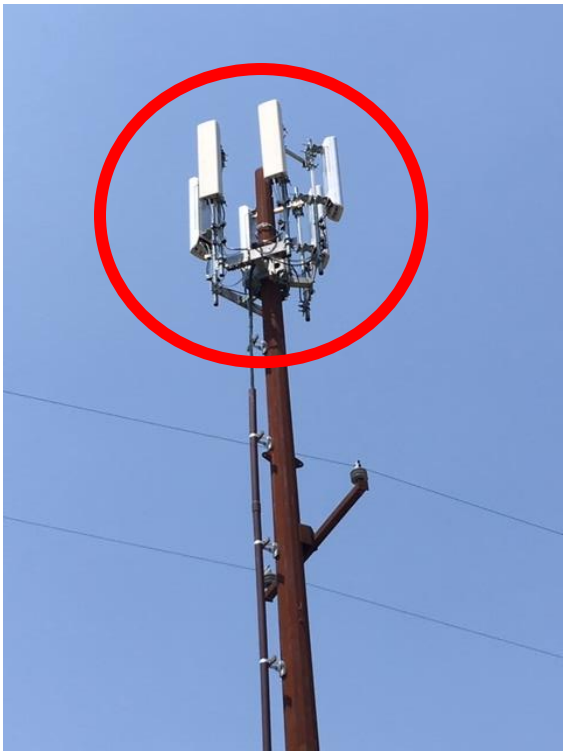
NEXT STEPS:
If approved, the applicant may proceed with the project and will be required to obtain all other permits required for the modification of the antenna array in a public right-of-way as proposed.

If denied, the applicant must modify the array to come into compliance with all antenna standards including modifying the diameter to be 30 inches or less. The City's Housing and Zoning Enforcement Division has the ability to impose fines if these modifications are not made in a timely manner.

ATTACHMENT A: VICINITY MAP



ATACHMENT B: SITE PHOTOGRAPHS



Views of existing antenna array that measures 80" in diameter – to be reduced to 39"

View of the house at 922 S. Emery Street

Open lot across Emery Street to the east of the utility pole

Elementary school lot to the south of the utility pole

View of the shed with antenna equipment on the rear of the subject property

Alternate view of shed with antenna equipment

ATTACHMENT C: APPLICATION MATERIALS

T-Mobile

SCOPE OF WORK

T-MOBILE IS PROPOSING TO REMOVE THREE (3) ANTENNAS, REPLACE THREE (3) ANTENNAS AND REPLACE ONE (1) HCS.

FINAL CONFIGURATION:
THREE (3) ANTENNAS AND ONE (1) HCS.

DATE:	28-Sep-18
DRAWN BY:	TDG/ALH
CHECKED BY:	RDE
FILE:	SL01635A

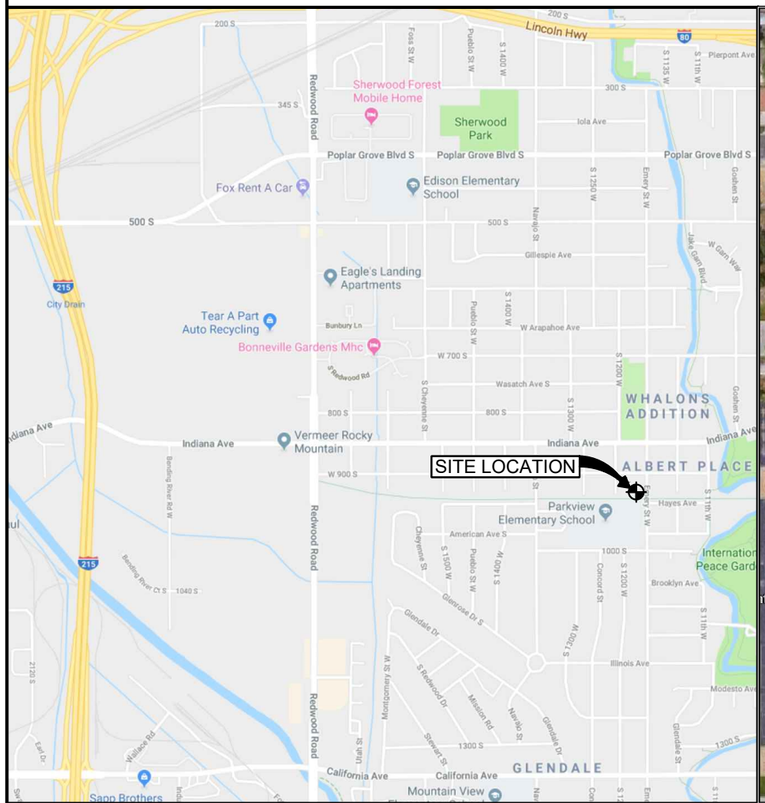
REVISIONS

DATE	DESCRIPTION	INITIAL

PARKVIEW SCHOOL
922 S. EMERY
SALT LAKE CITY, UT

SL01635A

GENERAL LOCATION MAP



VICINITY MAP

CONTACTS

NETWORK SYSTEM OWNER
T-MOBILE
121 WEST ELECTION ROAD
SUITE 330
DRAPER, UT 84020

PRINCIPAL POINT OF CONTACT
TERRY COX
801-860-0285

TELEPHONE UTILITY CONTACT
TERRY COX
801-860-0285

PROPERTY ADDRESS

R.F. ENGINEERING:
T-MOBILE
121 WEST ELECTION ROAD
SUITE 330
DRAPER, UT 84020

ELECTRIC UTILITY CONTACT
TERRY COX
801-860-0285

PROJECT MANAGER
DAREN JOHNSON
801-910-5180

SHEET INDEX

SIGNOFF

	DATE	PRINT NAME	SIGNATURE
NETWORK ENGINEER			
SITE DEVELOPMENT			
DEVELOPMENT MANAGER			
CONSTRUCTION MANAGER			
RF ENGINEER			
PROJECT MANAGER			
OPERATIONS			
LANDLORDS REPRESENTATIVE			

T-Mobile
121 WEST ELECTION RD
SUITE 330
DRAPER, UT 84020
801-816-4422
FAX 801-816-4420

REGISTERED PROFESSIONAL ENGINEER
9/26/18
#168426
STEVEN D ANDERSON
STATE OF UTAH

CX
CORP

ANDERSON ENGINEERING COMPANY INC.
801-972-6222

SITE NUMBER:
SL01635A
SITE NAME: PARKVIEW SCHOOL
CITY, STATE: SALT LAKE CITY, UT
SHEET: TITLE SHEET

T-1

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Conditional Use Emery Antenna Array
PLNPCM2018-00585

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GENERAL NOTES

1. DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, THIS SET OF DOCUMENTS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANY REQUIREMENTS DEEMED NECESSARY TO COMPLETE INSTALLATION AS DESCRIBED IN THE DRAWINGS AND OWNER'S PROJECT MANUAL.
2. DRAWINGS WERE PREPARED FROM STANDARDIZED DETAILS DEVELOPED AND PROVIDED BY ELECTRICAL CONSULTANTS, INC., AND T-MOBILE. STANDARDIZED DETAILS ARE TO BE CONFIRMED AND CORRELATED AT THE SITE BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS. STANDARDIZED DETAILS THAT REQUIRE MODIFICATIONS DUE TO ACTUAL FIELD CONDITIONS AND REQUIREMENTS MUST BE SUBMITTED TO, AND APPROVED BY, T-MOBILE PRIOR TO START OF WORK.
3. PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION/CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN. PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER VERBALLY AND IN WRITING.
4. THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
7. ALL WORK PERFORMED ON THE PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.
8. GENERAL CONTRACTOR SHALL PROVIDE, AT THE PROJECT SITE, A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.
10. SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT SITE.
11. CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.
12. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
13. CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. CONTRACTOR SHALL REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
14. THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
15. THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.
16. THE CONTRACTOR SHALL PROVIDE T-MOBILE PROPER INSURANCE CERTIFICATES NAMING T-MOBILE AS ADDITIONAL INSURED, AND T-MOBILE PROOF OF LICENSE(S) AND PL & PD INSURANCE.

SYMBOLS & ABBREVIATIONS

——— T ———	TELEPHONE
——— P ———	POWER
——— G ———	GROUND WIRE
——— CC ———	COAXIAL CABLE
	ANTENNA
A1	ANTENNA MARK NO.
C_L	CENTERLINE
[E]	EXISTING
[N]	NEW
W/	WITH
PBO	PROVIDED BY OWNER
	DETAIL NUMBER SHEET NUMBER
V.I.F.	VERIFY IN FIELD

DATE:	28-Sep-18
DRAWN BY:	TDG/ALH
CHECKED BY:	RDE
FILE:	SL01635A

REVISIONS

DATE	DESCRIPTION	INITIAL

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801-816-4422
FAX 801-816-4420

CX
CORP

ANDERSON
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801-972-6222

SITE NUMBER:
SL01635A
SITE NAME: PARKVIEW SCHOOL
CITY, STATE: SALT LAKE CITY, UT
SHEET: GENERAL NOTES

G-1

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Conditional Use - Emery Antenna Array
PLNPCM2018-00585

DATE:	28-Sep-18
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REGISTERED PROFESSIONAL ENGINEER
9/26/18
#168426
STEVEN D ANDERSON
STATE OF UTAH

CX
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801-972-6222

SITE NUMBER:
SL01635A
SITE NAME: PARKVIEW SCHOOL
CITY, STATE: SALT LAKE CITY, UT
SHEET: SITE PLAN

A-1

Conditional Use - Emery Antenna Array
PLNPCM2018-00585

OVERALL SITE PLAN 1
NOT TO SCALE

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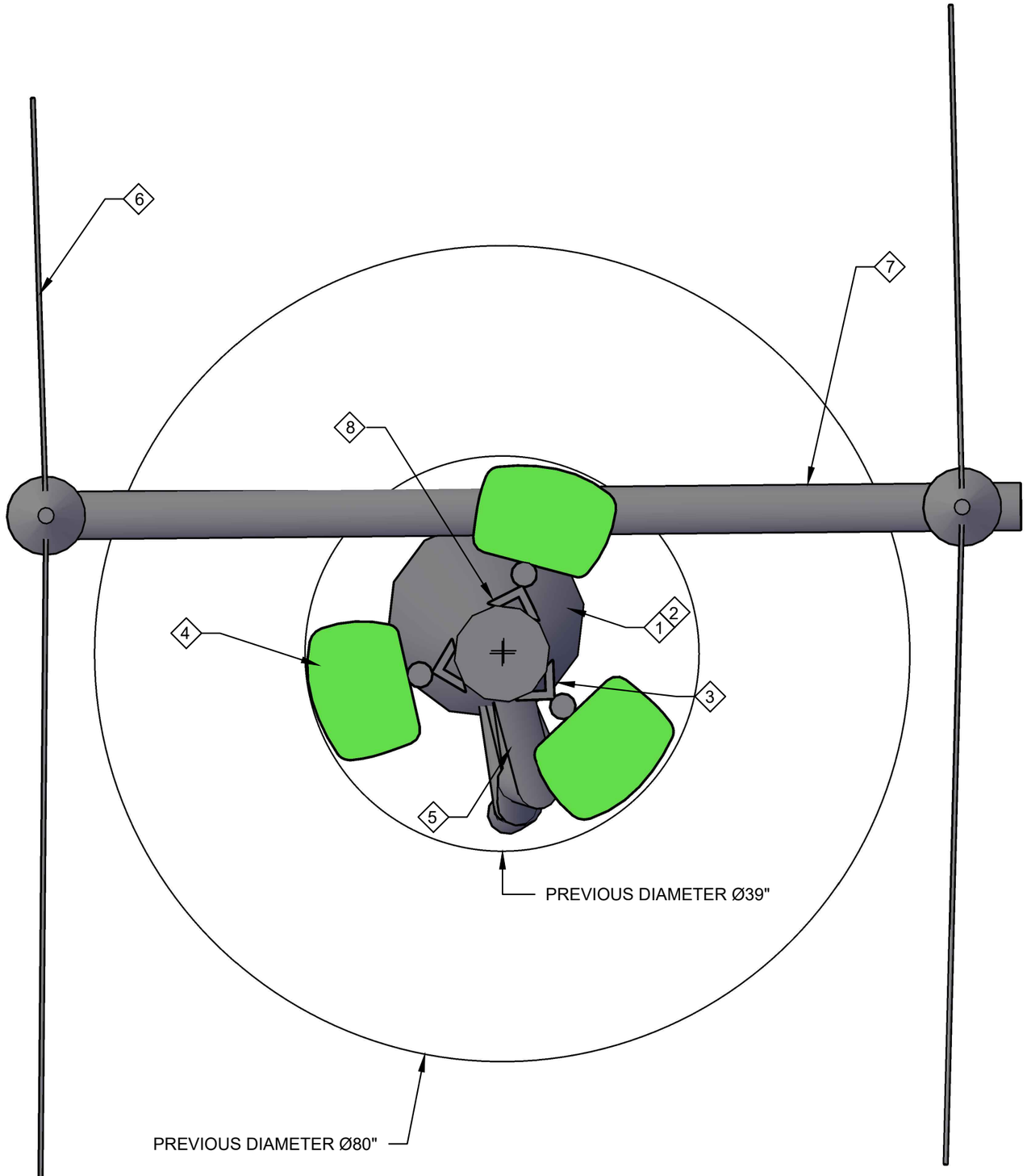
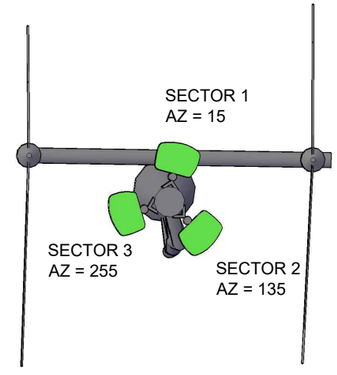


ENLARGED SITE PLAN 1
NOT TO SCALE

CONSTRUCTION PLAN KEYED NOTES

1. T-MOBILE ANTENNA ARRAY
2. EXISTING ANTENNA SUPPORT STRUCTURE
3. EXISTING ANTENNA SUPPORT STRUCTURE FOUNDATION - ENGINEERING PROVIDED BY OTHERS
4. PROPOSED ANTENNAS (PROVIDED BY T-MOBILE), TYP. AIR32 KRD901146-1 B66A B2A (OCTO)
5. COAXIAL CABLING TO ANTENNAS (PROVIDED BY T-MOBILE). SEE RF DATA SHEET FOR SIZE.
6. POWER LINES
7. POWER LINE SUPPORT
8. SITE PRO CHM3 TRIPLE SECTOR CHAIN MOUNT



AZIMUTH DETAIL 2
NOT TO SCALE

SITE NOTES

1. VERIFY AZIMUTHS WITH FINAL SITE CONFIGURATION SHEET FROM R.F. ENGINEER.
2. PROVIDE 4" CONDUIT EQUIPPED WITH 1 PULL STRING AND ONE (1)-1" INNERDUCT. ALL TELCO CONDUITS AND TELCO WIRING MUST MAINTAIN A MINIMUM SEPARATION DISTANCE OF 18" AWAY FROM ALL A/C POWER CONDUITS AND WIRING.

DATE:	28-Sep-18
DRAWN BY:	TDG/ALH
CHECKED BY:	RDE
FILE:	SL01635A

REVISIONS

DATE	DESCRIPTION	INITIAL

T-Mobile

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REGISTERED PROFESSIONAL ENGINEER
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#168426
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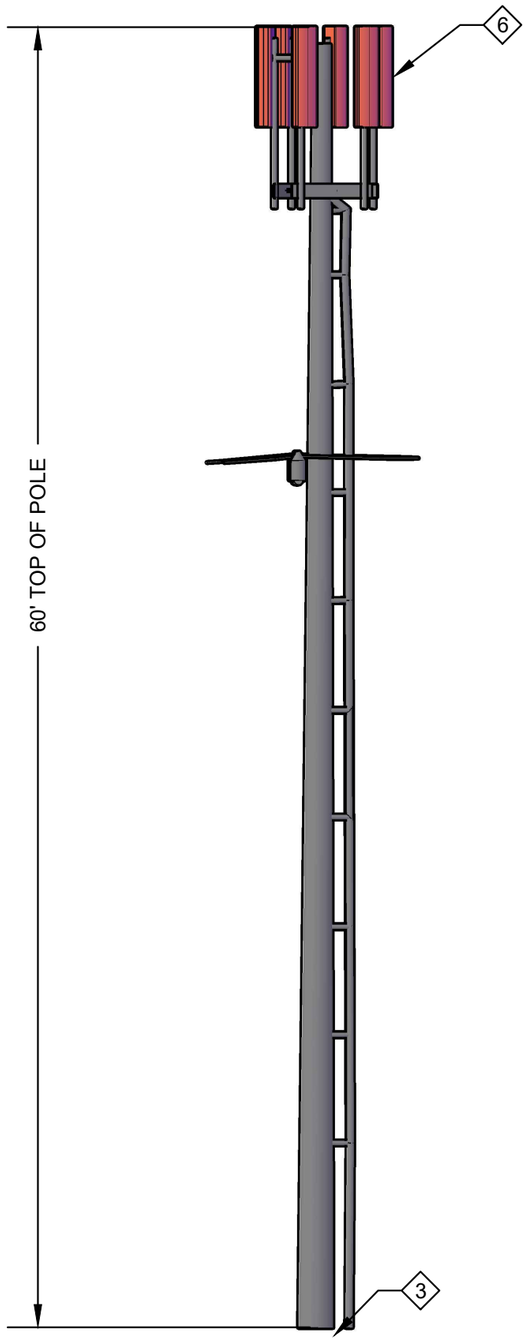
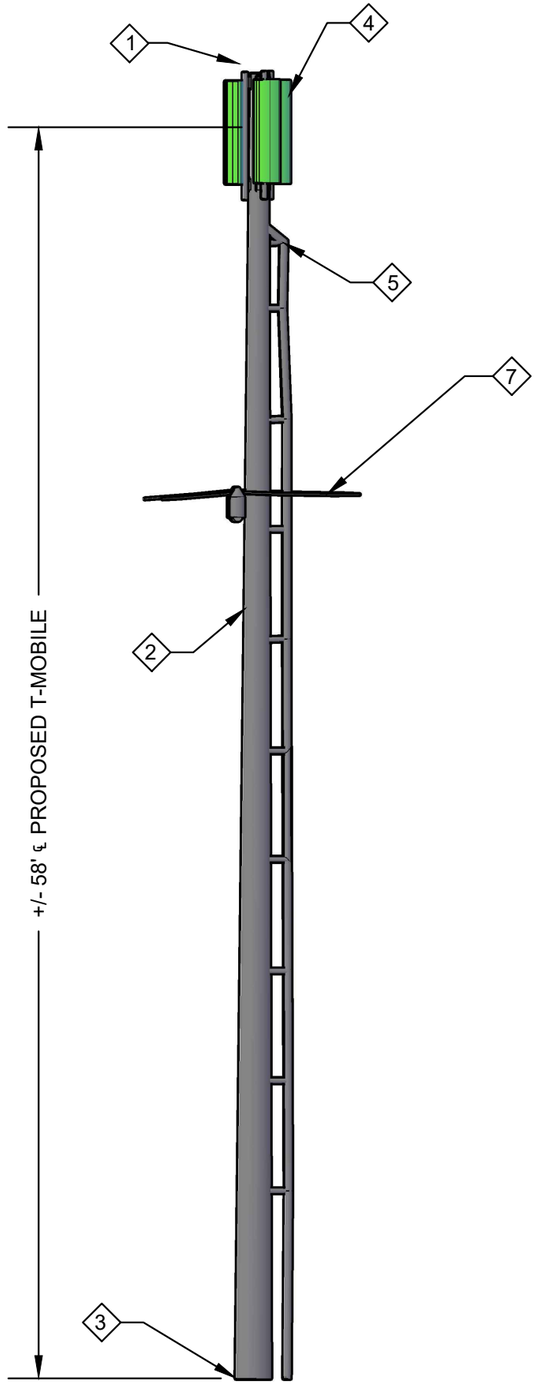
SITE NUMBER:
SL01635A
SITE NAME: PARKVIEW SCHOOL
CITY, STATE: SALT LAKE CITY, UT
SHEET: ENLARGED SITE PLAN

A-2



EXISTING WEST ELEVATION 1
NOT TO SCALE



PROPOSED WEST ELEVATION 2
NOT TO SCALE

CONSTRUCTION PLAN KEYED NOTES

1. T-MOBILE ANTENNA ARRAY
2. EXISTING ANTENNA SUPPORT STRUCTURE
3. EXISTING ANTENNA SUPPORT STRUCTURE FOUNDATION - ENGINEERING PROVIDED BY OTHERS
4. PROPOSED ANTENNAS (PROVIDED BY T-MOBILE) ERICSSON AIR32 KRD901146-1 B66A B2A (OCTO)
5. COAXIAL CABLING TO ANTENNAS (PROVIDED BY T-MOBILE). SEE RF DATA SHEET FOR SIZE.
6. EXISTING ANTENNAS TO BE REMOVED, TYP.
7. POWER LINES
8. MAINTAIN 10' SPACE BETWEEN POWER LINES AND ANTENNAS

DATE:	28-Sep-18
DRAWN BY:	TDG/ALH
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801-972-6222

SITE NUMBER:
SL01635A
SITE NAME: PARKVIEW SCHOOL
CITY, STATE: SALT LAKE CITY, UT
SHEET: ELEVATION VIEW

A-3

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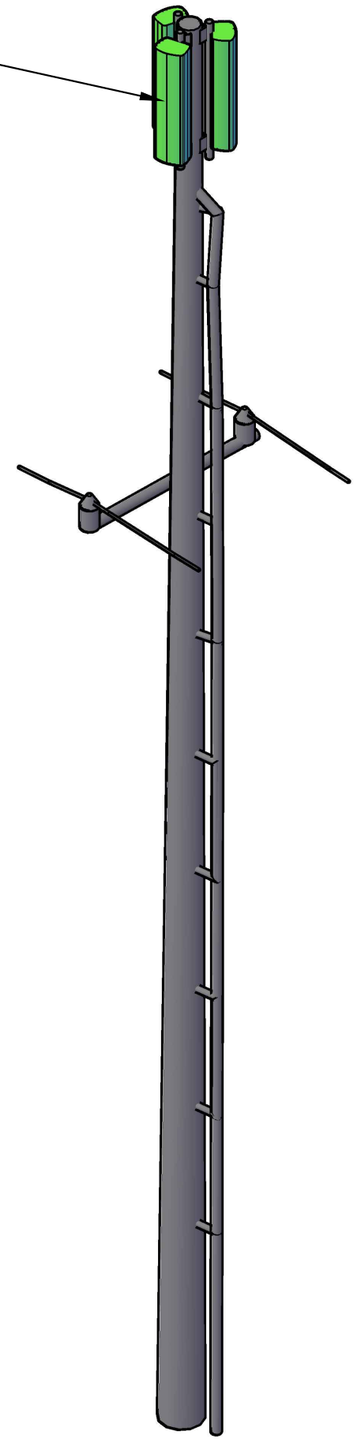
PROPOSED T-MOBILE EQUIPMENT, TYP.
ERICSSON AIR32 KRD901146-1 B66A B2A (OCTO)



ISOMETRIC VIEW 1
NOT TO SCALE

DATE:	28-Sep-18
DRAWN BY:	TDG/ALH
CHECKED BY:	RDE
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REVISIONS

DATE	DESCRIPTION	INITIAL

T-Mobile
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REGISTERED PROFESSIONAL ENGINEER
9/26/18
#168426
STEVEN D. ANDERSON
STATE OF UTAH

CX
CORP

ANDERSON ENGINEERING COMPANY INC.
801-972-6222

SITE NUMBER:
SL01635A
SITE NAME: PARKVIEW SCHOOL
CITY, STATE: SALT LAKE CITY, UT
SHEET: ISOMETERIC VIEW

A-4

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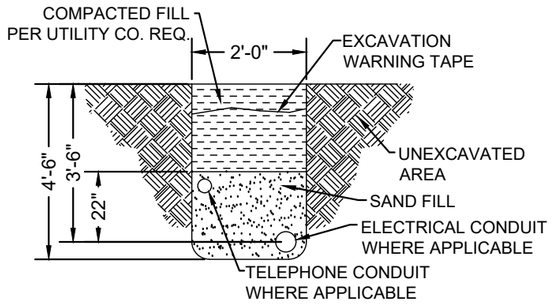
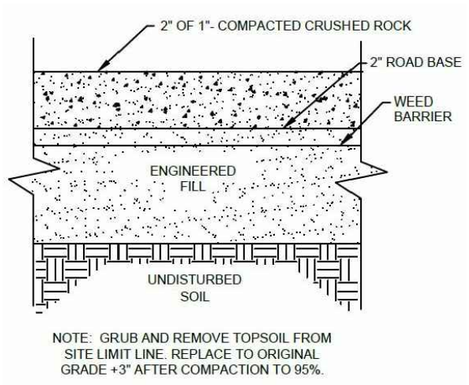
NOTE:
POWER AND TELCO MUST MAINTAIN 18" SEPARATION



UTILITY TRENCH DETAIL 1
NOT TO SCALE

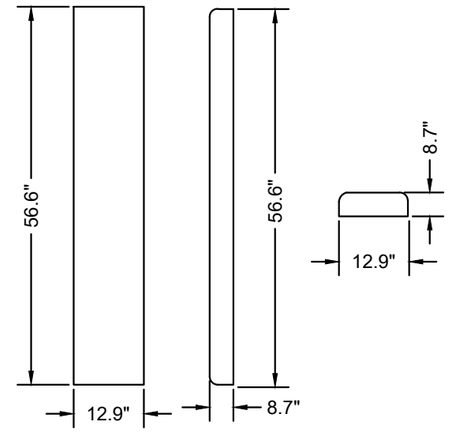


NOTE: GRUB AND REMOVE TOPSOIL FROM
SITE LIMIT LINE. REPLACE TO ORIGINAL
GRADE +3" AFTER COMPACTION TO 95%.

SITE SOIL SECTION (TYP.) 2
NOTE: GRUB AND REMOVE TOPSOIL FROM SITE LIMIT LINE. REPLACE TO ORIGINAL GRADE +3" AFTER COMPACTION TO 95%.

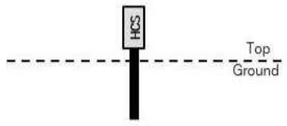
NOT TO SCALE

ERICSSON - AIR32 KRD901146-1 B66A B2A (OCTO) (3)



FLAT PANEL PCS DIRECTIONAL ANTENNA (TYP)
SEE RF DATA SHEET FOR ANTENNA TYPE

ANTENNA DETAIL – PROPOSED 3
NOT TO SCALE



PROPOSED TEMPLATE IMAGE 4
NOT TO SCALE

DATE:	28-Sep-18
DRAWN BY:	TDG/ALH
CHECKED BY:	RDE
FILE:	SL01635A

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T-Mobile
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9/26/18

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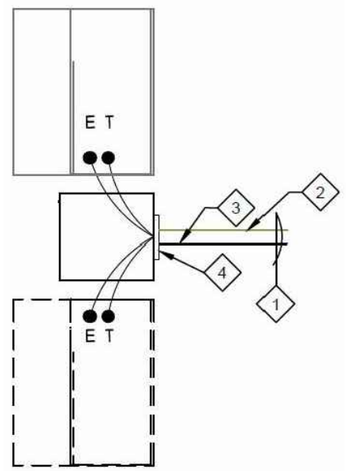
801-972-6222

SITE NUMBER:
SL01635A
SITE NAME: PARKVIEW SCHOOL
CITY, STATE: SALT LAKE CITY, UT
SHEET: CONSTRUCTION DETAILS

A-5

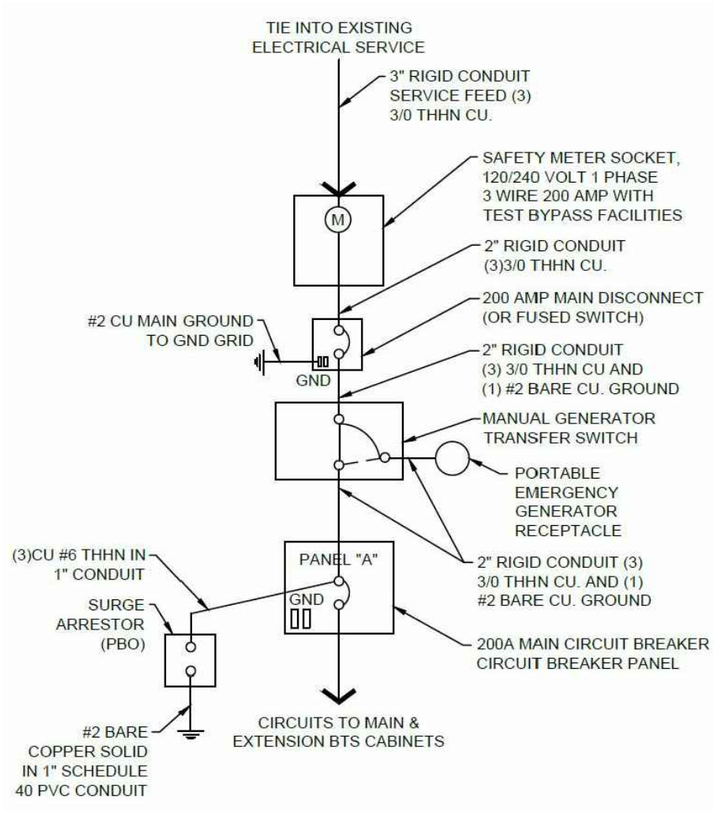
E:\CX Corp\SL01635A Parkview School\2018\Drawings\CAD Drawings\160888 SL01635A Tower Model.dwg

TELEPHONE AND POWER SOURCE ROUTES TO BE DETERMINED BY LOCAL UTILITY COMPANIES.



SCHEMATIC ELECTRIC/TELEPHONE PLAN 1

NOT TO SCALE



200AMP POWER ONE LINE DIAGRAM 2

NOT TO SCALE

ELECTIRCAL/TELEPHONE KEYED NOTES

1. RUN (3) #6 3/4 THHN IN 3" CONDUIT UNDERGROUND FROM ELECTRICAL SERVICE TO SUB METER/ DISCONNECT SWITCH LOCATION. CONTRACTOR SHALL FIELD VERIFY EXACT ROUTING OF ELEC./TELCO. SEE DETAIL 3/A-4 FOR TRENCHING REQUIREMENTS. FOLLOW ALL APPLICABLE LOCAL CODES AND UTILITY REQUIREMENTS.
2. 4" PVC CONDUIT. SEE NOTE #1 FOR ROUTING.
3. 3" GALVANIZED RIGID CONDUIT FOR POWER ROUTING TO BTS.
4. SEE POWER ONE LINE DIAGRAM 2/E-1

SITE NOTES

1. VERIFY AZIMUTHS WITH FINAL SITE CONFIGURATION SHEET FROM R.F. ENGINEER.
2. PROVIDE 4" CONDUIT EQUIPPED WITH 1 PULL STRING AND ONE (1)-1" INNERDUCT. ALL TELCO CONDUITS AND TELCO WIRING MUST MAINTAIN A MINIMUM SEPARATION DISTANCE OF 18" AWAY FROM ALL A/C POWER CONDUITS AND WIRING.

DATE:	28-Sep-18
DRAWN BY:	TDG/ALH
CHECKED BY:	RDE
FILE:	SL01635A

REVISIONS

DATE	DESCRIPTION	INITIAL

T-Mobile
121 WEST ELECTION RD
SUITE 330
DRAPER, UT 84020
801-816-4422
FAX 801-816-4420

REGISTERED PROFESSIONAL ENGINEER
9/26/13
#168426
STEVEN D. ANDERSON
STATE OF UTAH

CX
CORP

ANDERSON
ENGINEERING COMPANY INC.
801-972-6222

SITE NUMBER:
SL01635A

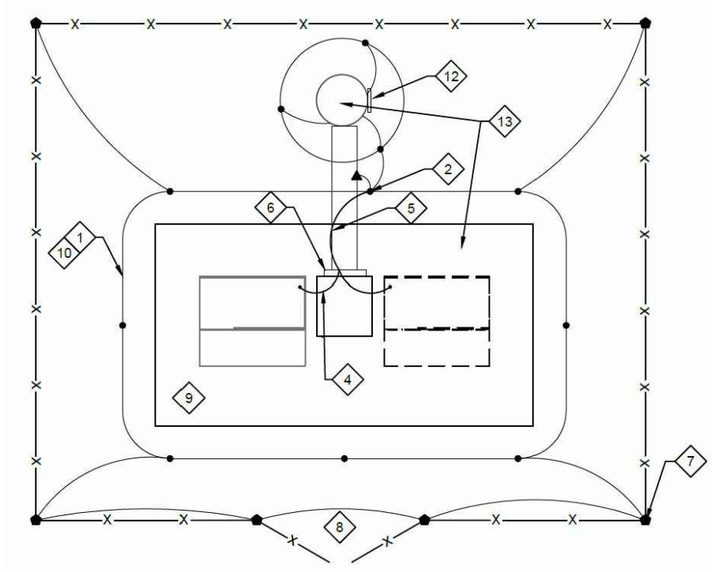
SITE NAME:	PARKVIEW SCHOOL
CITY, STATE:	SALT LAKE CITY, UT
SHEET:	ANTENNA AND GROUNDING DETAILS

E-1

GROUNDING NOTES

1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS. IF SITE SOIL CONDITIONS ARE CORROSIVE USE OF A LARGER MAIN GROUND RING CONDUCTOR MAY BE NECESSARY.
2. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURERS PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.
3. ALL GROUND CONNECTIONS SHALL BE CADWELD BELOW GROUND LEVEL. ALL GROUND WIRE SHALL BE SOLID COPPER WITH GREEN INSULATED THHN WIRE ABOVE GROUND EXCEPT CONDUCTORS CONNECTING TO GROUND RING.
4. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE TO A MAXIMUM OF 5 OHMS. IF THE GROUND TEST DID NOT ACHIEVE THE MAXIMUM OF 5 OHMS, CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL GROUNDING TO MEET 5 OHM. MAX. REQUIREMENT. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY THE T-MOBILE REPRESENTATIVE.
5. ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED T-MOBILE REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM.
6. NOTIFY ARCHITECT/ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
7. IF SURGE SUPPRESSER IS AN EXTERIOR MOUNT, RUN A #2 BARE CU GROUND WIRE IN A 1" SCHED 40 PVC CONDUIT TO SIDE SPLICE CADWELD @ GROUND RING. HEAT RADIUS CONDUIT TO PRODUCE LARGE RADIUS BENDS. STRAP TO SLAB AT 2 POINTS (MIN).
8. ALL GROUNDING WIRE RUNS AND CONNECTIONS, BOTH ABOVE AND BELOW GRADE, SHALL BE LOCATED INSIDE OF THE LEASE AREA LINE.
9. FOR PRECISE SITE LOCATION AND CONFIGURATION REFER TO SHEET A-2.
10. ALL GROUNDING ELECTRODES PRESENT AT A BUILDING OR STRUCTURE MUST BE BONDED TOGETHER TO FORM A GROUNDING ELECTRODE SYSTEM, AS REQUIRED BY NEC® SECTION 250.50 INCLUDING MONOPOLE, TOWER OR BUILDING FOUNDATIONS. REBAR SHALL BE BONDED TO FORM A CONCRETE ENCASED ELECTRODE PER NEC 250.52(A)(3) IN ADDITION TO AND TIED TO THE TYPICAL GROUNDING SYSTEM SHOWN.
11. THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO T-MOBILE CORP. SERVICES IS STRICTLY PROHIBITED.

Ground Monitoring Well



SYMBOL	DESCRIPTION
⬟	BRONZE CLAMP
●	COPPER GROUND ROD
▲	CADWELD CONNECTION
■	SIDE SPLICE CADWELD

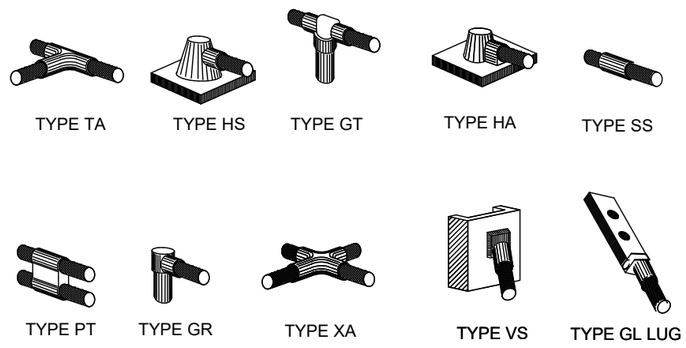
NOTE:
IF SURGE SUPPRESSER IS AN EXTERIOR MOUNT, RUN A #2 BARE CU GROUND WIRE IN A 1" SCHED 40 PVC CONDUIT TO SIDE SPLICE CADWELD @ GROUND RING. HEAT RADIUS CONDUIT TO PRODUCE LARGE RADIUS BENDS. STRAP TO SLAB AT 2 POINTS (MIN).

Conditional Use - Emery Antenna Array
PLNPCM2018-00585

TYPICAL GROUNDING PLAN 1
SCALE: NTS

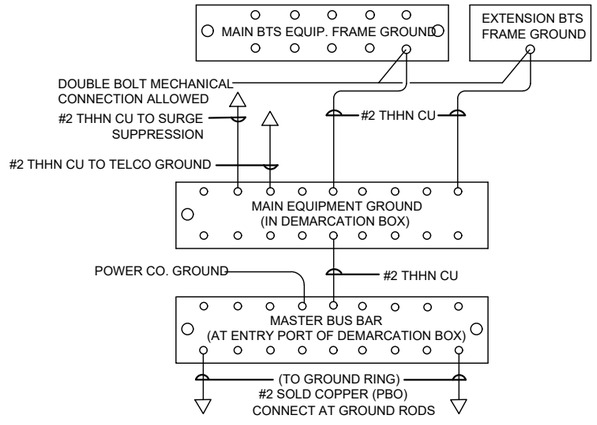
GROUNDING KEYED NOTES

1. EXTERNAL GROUND RING: #2 BARE SOLID COPPER WIRE AT 2'-6" BELOW GRADE (REFER TO DETAIL 3/E-3).
2. MAIN GROUND CONNECTION POINT.
3. 5/8" X 8'-0" COPPER GROUND ROD (PBO). SPACE GROUND ROD AT 10' O.C. MIN.-TYPICAL AS REQUIRED. REFER TO 3/E-3.
4. GROUND FROM INTERNAL BTS GROUND BAR TO MGB LOCATED IN SYSTEM DEMARCATION CABINET. RUN GROUNDING LINE INSIDE OF 2" PVS CONDUIT.
5. TIE INTO GROUND RING.
6. MASTER GROUND BUS BAR (MGB) LOCATED IN SYSTEM DEMARCATION CABINET.
8. CADWELD GROUND CONNECTION FROM GATE TO FENCE POST, FOR PRECISE GATE LOCATION REFER TO A-2
9. CONCRETE EQUIPMENT PAD
10. #2 SOLID COPPER WIRE
12. GROUND BAR AT BASE MONOPOLE SEE SHEET E-3 FOR DETAIL.
13. CONCRETE ENCASED ELECTRODE (IF AVAILABLE) SEE NOTE 10.



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

CADWELD DETAILS 2
NOT TO SCALE



GROUNDING SCHEMATIC 3
NOT TO SCALE

DATE:	28-Sep-18
DRAWN BY:	TDG/ALH
CHECKED BY:	RDE
FILE:	SL01635A

REVISIONS

DATE	DESCRIPTION	INITIAL

T-Mobile
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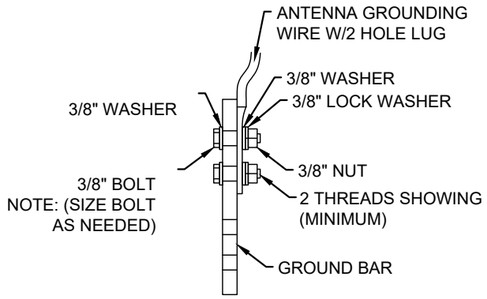
REGISTERED PROFESSIONAL ENGINEER #168426 STEVEN D. ANDERSON STATE OF UTAH 9/26/18

CX
CORP

ANDERSON ENGINEERING COMPANY INC.
801-972-6222

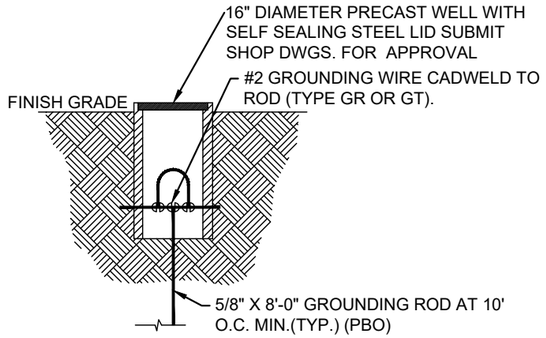
SITE NUMBER:
SL01635A
SITE NAME: PARKVIEW SCHOOL
CITY, STATE: SALT LAKE CITY, UT
SHEET: ANTENNA AND GROUNDING DETAILS

E-2



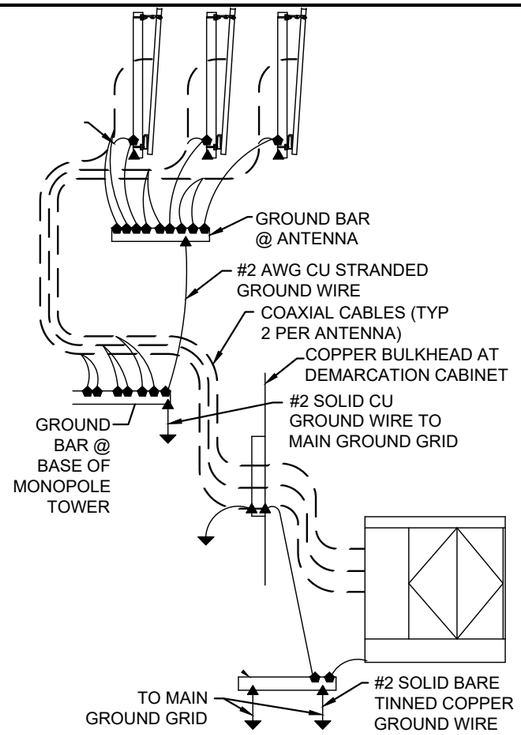
COAX GRND TO BUSS BAR DETAIL 1

NOT TO SCALE



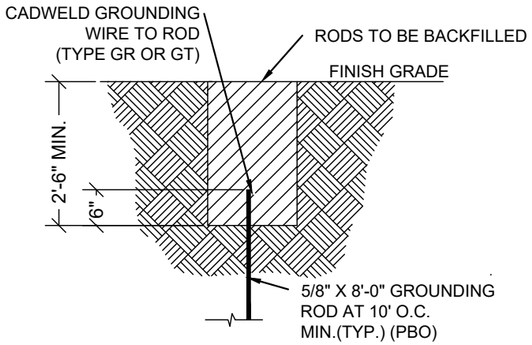
INSPECTION WELL DETAIL 2

NOT TO SCALE



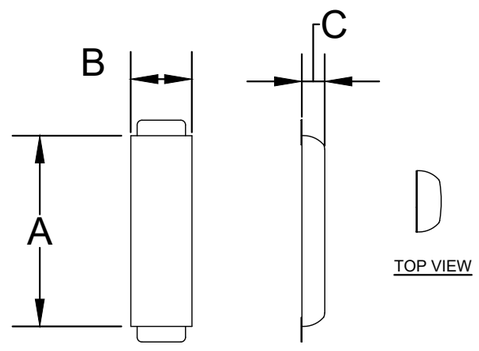
ANTENNA GROUNDING DIAGRAM 3

NOT TO SCALE



GROUNDING ROD DETAIL (TYP.) 4

NOT TO SCALE

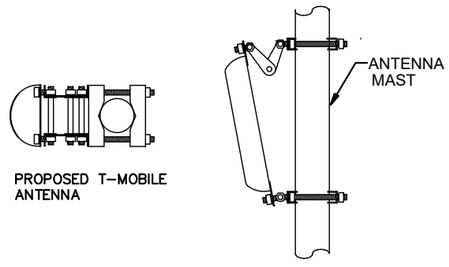


	PART NO.
DIM.	AIR32 KRD901146-1 B66A B2A
A	56.6
B	12.9
C	8.7

INCHES

ANTENNA 5

NOT TO SCALE



ANTENNA DOWNTILT 6

NOT TO SCALE

DATE:	28-Sep-18
DRAWN BY:	TDG/ALH
CHECKED BY:	RDE
FILE:	SL01635A

REVISIONS

DATE	DESCRIPTION	INITIAL

T-Mobile
121 WEST ELECTION RD
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REGISTERED PROFESSIONAL ENGINEER
9/26/18
#168426
STEVEN D. ANDERSON
STATE OF UTAH

CX
CORP

ANDERSON
ENGINEERING COMPANY INC.
801-972-6222

SITE NUMBER:
SL01635A
SITE NAME: PARKVIEW SCHOOL
CITY, STATE: SALT LAKE CITY, UT
SHEET: ANTENNA AND GROUNDING DETAILS

E-3

Condition of Use - Twenty Antenna Array
PLNPCM2018-00585

TOWER GROUNDING SYSTEM NOTES:

1. **TOWER RADIAL GROUND**
   #2 SOLID COPPER WIRE CADWELDED (OR FASTENER APPROVED BY PROJECT MANAGER) TO TOWER BASE. EXTEND WIRE 30' MINIMUM IN SWEEPING CONFIGURATION AS SHOWN (BEYOND LEASE LINE IF POSSIBLE, IF NOT AS SHOWN ON PRINT) AT A MINIMUM DEPTH OF 30". ALL GROUND RODS TO BE 8' COPPER CLAD. FIRST GROUND RODS FROM TOWER ARE TO BE PLACED 10' EQUAL DISTANCE (BETWEEN ROD CENTERS AND A MINIMUM OF EVERY 10' ALONG TOTAL LENGTH. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS!

2. **TOWER RING GROUND -**
   ONLY ONE (1) CONNECTION OF THIS TYPE FOR EACH TOWER! SAME CONSTRUCTION AS NOTE 1 ABOVE EXCEPT THE TERMINATION AT THE GROUNDING RING MUST BE THREE WAY CONNECTED. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS!

3. **EQUIPMENT BUILDING RING GROUND -NOT APPLICABLE**
   ALWAYS OBSERVE THE TURN DIRECTIONS SHOWN WHEN PLACING BENDS OR CONNECTION! USE #2 SOLID COPPER WIRE PLACED WITHIN 3' (± 6") FROM EDGE OF CONCRETE PAD AT A MINIMUM DEPTH OF 30". ALL CONNECTIONS TO GROUND RING ARE TO BE CADWELDED. ALL GROUND RODS TO BE 8' COPPER CLAD AND PLACED 10' EQUAL DISTANCE (BETWEEN ROD CENTERS) AND A MINIMUM OF EVERY 10 ALONG TOTAL LENGTH. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS!

4. **SINGLE POINT GROUND BAR (COAX BULKHEAD) -**
   ALWAYS OBSERVE THE DIRECTIONS SHOWN WHEN PLACING BENDS OR CONNECTIONS TO GROUND RING! USE TWO (2) #2 SOLID COPPER OR TWO (2) 3" COPPER RIBBONS ATTACHED ON OPPOSITE ENDS OF BAR OR BULKHEAD EXTENDING DIRECTLY TO GROUND RING AS SHOWN. ALL WIRE CONNECTIONS TO GROUND RING ARE TO BE CADWELDED, RIBBONS MAY BE ATTACHED TO GROUND RING WITH A "LISTED" PRESSURE CONNECTION WITH APPROVAL OF CONSTRUCTION MANAGER. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS!

5. **EQUIPMENT SHELTER INNER BONDING RING - NOT APPLICABLE**
   #2 SOLID COPPER WIRE CADWELDED (TO INNER BONDING RING AT A LOCATION EITHER ABOVE THE SOIL LINE OR JUST INSIDE INTERIOR OF BUILDING. ALWAYS USE PVC (NONMETALLIC) SLEEVES WHEN ENTERING THE STRUCTURE! THIS TYPE OF BOND IS REQUIRED AT EACH OUTSIDE CORNER AND AT DISTANCES NOT TO EXCEED 50' ALONG ANY STRAIGHT WALL. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS!

6. **FENCE EQUALIZATION BOND -**
   #2 SOLID COPPER WIRE CADWELDED TO BUILDING GROUND RING AND ATTACHED TO EACH INSIDE OR OUTSIDE CORNER FENCE POST AND/OR GATE POST WITH A "LISTED" WIRE CLAMP. PLACE AT A MINIMUM 12" DEPTH (SEE NOTE 11 BELOW FOR CROSSING CLEARANCES). IF METALLIC POST IS NOT IN CEMENT PLACE AN ADDITIONAL 8' GROUND ROD AT POST LOCATION.

7. **GATE EQUALIZATION BOND -**
   GROUND ROD AT EACH POST LOCATION.

8. **POWER / TELEPHONE TRENCH -**
   UTILITIES CAN EITHER BE PLACED IN SAME TRENCH (NESCRANDUM SEPARATION) OR IN SEPARATE TRENCH AT A 36" DEPTH. ALWAYS PLACE THESE FACILITIES BELOW 36" BELOW FINISH GRADE WHILE MAINTAINING A 12" HORIZONTAL AND VERTICAL SEPARATION FROM ANY RADIAL OR GROUND RING SYSTEMS IN, ON, OR ADJACENT TO THE RADIO SITE.

9. **POWER / TELEPHONE ENTRANCE -**
   THE BUILDING RING GROUND MEETS OR EXCEEDS THE NEC ARTICLE 250 UTILITY PROTECTION GROUND. THEREFORE, INFORM LOCAL INSPECTOR(S) THAT ADDITIONAL GROUND RODS ARE NOT REQUIRED. ALL UTILITY GROUNDS MAY BE ATTACHED TO THE #2 SOLID COPPER WIRE DETAILED IN NOTE 10 BELOW. IF LOCAL POWER COMPANY CODES REQUIRE AN ADDITIONAL GROUND ROD; BOND THE TWO FACILITIES TOGETHER AT THIS LOCATION.

10. **UTILITY GROUNDING ELECTRODE BOND -**
    USE #2 SOLID COPPER WIRE PLACED WITHIN 3' OF UTILITY ENTRANCE AT DEMARCATION CABINET ENTRY PORT. ALL CONNECTIONS TO GROUND RING ARE TO BE CADWELDED. CONNECTION TO DEMARCATION CABINET ENTRY PORT TO BE WITH A "LISTED" CONNECTION. ALL BENDS MUST MAINTAIN A MINIMUM 12" RADIUS!

11. **RADIAL GROUND / FENCE BOND CROSSINGS -**
    WHEREVER PRACTICAL, TO REDUCE MAGNETIC COUPLING, WHERE THESE FACILITIES MUST CROSS AT A 90° ANGLE WHILE MAINTAINING A MINIMUM 18" VERTICAL SEPARATION.

12. **COAX GROUNDING KITS -**
    USE INDIVIDUAL "LISTED" GROUNDING KITS FOR EACH COAX CABLE. BOND TO TOWER BONDING BUS BAR WITH #2 SOLID COPPER WIRE WITH 2 HOLE CRIMPED CONNECTIONS.

13. **GROUNDING BUS BAR KIT -**
    THE GROUNDING BUS BAR AND ATTACHMENT KIT MUST BE DIRECTLY BOLTED TO THE TOWER STRUCTURE WITHOUT ELECTRICAL INSULATORS.

14. **ICE BRIDGE BONDING -**
    THE ICE BRIDGE SHOULD NOT BE BONDED TO THE TOWER STRUCTURE! IT SHOULD ONLY BE BONDED AT ONE END TO THE ENTRANCE BULKHEAD (SINGLE POINT GROUND BAR). USE #2 SOLID COPPER WIRE WITH 2 HOLE CRIMPED CONNECTIONS.

15. **RADIO BAY TO COAX BULKHEAD BOND -**
    THIS IS THE ONLY CABINET TO GROUND BOND WIRE ATTACHED TO THE RADIO BAY! USE #2 SOLID COPPER WIRE WITH 2 HOLE CRIMPED CONNECTIONS OR A 3" COPPER STRAP.

16. **RADIO BAY ISOLATION KIT -**
    CONTACT RADIO EQUIPMENT SUPPLIER FOR SPECIFICATION AND INSTALLATION PROCEDURES.

SWEEP TEST PROCEDURE FOR PCS 1900 ANTENNAS AND FEEDERS:

The following procedure describes the test and fault finding procedure to be followed for all antennas.

1. Test equipment should consist of a sweep oscillator set to run between 1800 and 2000 MHz, directional coupler with at least 35 dB directivity and scalar network analyzer with resolution of better than 0.2 dB. A matched 50 Ohm load and short circuit termination are also required.

2. Set up the return loss measuring set as per the manufacturers instructions and calibrate with the short (OdB return Loss VSWR = infinity.)

3. Inform the Operations staff at the switch that sweep tests are to begin at this site so they can disable transmission to avoid potential TRX damage with the antenna port open. (if applicable)

4. Composite Return Loss: Disconnect the bottom jumper at the BTS and connect it to the main port of the bridge. Return loss of the composite jumpers, feeder and antenna should be <1.4dB (VSWR>1.5:1) between 1800 and 2000 MHZ.

5. Feeder Return Loss: Turn off the sweep generator, disconnect the top jumper at the antenna and connect a dummy load to the end of the top jumper with a DIN - N adapter. Power up the generator and measure the return loss looking into the bottom jumper. The return loss should not exceed 1.8dB (VSWR>1.3:a) between 1800 and 2000 MHZ.

6. Feeder Insertion loss: Replace the load with a short circuit termination and measure the maximum and minimum return loss between 1800 and 2000. Add these together and divide by 4 to give the average 1 way insertion loss which should be < 3 dB.

7. If the conditions in 4,5 and 6 are met then the test is complete. If 4 is bad but 5 & 6 are OK then replace the antenna and retest. If 5 or 6 are bad then measure RL of main feeder only. If return Loss improves to -20 or better or insertion loss improves by more than 2dB then replace or reterminate the bottom and top jumper. Otherwise replace the main feeder run. Notify Project management and RF Engineering of any faulty hardware.

   All test results should be clearly marked with site, feeder number, date, measurement time.

COAXIAL CABLE IDENTIFICATION:

A. To provide easy identification and uniform marking of antenna cabling, the following shall apply.

1. LOCATION: Markings shall be made by use of 3M colored, 2-inch wide tape affixed at typically four places on the coax cable run as follows:

First - location is on the coax at the connector nearest the antenna where the coax and jumper are connected.

Second - at the base of the tower structure. (For towers only).

Third - at a point outside the BTS.

Fourth - at connection point inside BTS.

2. SECTOR IDENTIFICATION. Normally a site will have up to three sectors. Sectors shall be designated by numbering each in a clockwise manner: the first sector is the one closest to zero degrees (North), the second and third follow clockwise in sequence.

Sector #1 coax will have one band of a red colored tape for the first coax run. Normally sites will initially go on the air with as few as two antennas per sector and as the system grows, an additional two antennas will be added.

Sector #2 coax will have one band of green colored tape.

Sector #3 coax will have one band of blue colored tape.

3. For more than one antenna per site the following will be adhered to: Facing the back of the antenna, starting from your left antenna, mark it with one band, moving right on the same sector to the next antenna, mark it with two bands of colored tape. Continue with the same method for as many antennas you have for each sector. Repeat this for every sector.

4. In addition to the colored tape apply permanent markings as follows:

1 inch brass round tags marked with Principal 1 (P1), Principal 2 (P2), Principal 3 (P3), Diversity 1 (D1), Diversity 2 (D2), and Diversity 3 (D3) to be attached by a fourteen (14) gauge black electrical wire.

DATE:	28-Sep-18
DRAWN BY:	TDG/ALH
CHECKED BY:	RDE
FILE:	SL01830A

REVISIONS

DATE	DESCRIPTION	INITIAL

T-Mobile
121 WEST ELECTION RD
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DRAPER, UT 84020
801-816-4422
FAX 801-816-4420

REGISTERED PROFESSIONAL ENGINEER
9/26/13
#168426
STEVEN D. ANDERSON
STATE OF UTAH

CX
CORP

ANDERSON
ENGINEERING COMPANY INC.
801-972-6222

SITE NUMBER:
SL01830A
SITE NAME: SLCC_SOUTH_CAMPUS
CITY, STATE: SALT LAKE CITY, UT
SHEET: ELECTRICAL NOTES

E-4

Conditional Use - Emery Antenna Array
PLNPCM2018-00585

CUP for Salt Lake City –
922 South Emery Ave, SLC -

The purpose of this CUP application for T-Mobile cell site at 922 South Emery Ave, SLC - is to modify the loading and equipment on this telecommunication tower, which is a PacifiCorp utility pole. We are decreasing the number of Antennas from (6) to (3).

Further, there won't be any RRU's or TMA's installed on this tower – in order to further decrease the loading.

This will decrease the diameter of T-Mobile's Antenna Array from 80'' to 39". Unfortunately, due to the new and ever-changing technology that goes into wireless antennas, we are not able to get this to 30".

The height of the pole will not change, and there will be no foundational, or electrical change.

Thank you,

- Kalab Cox

T-Mobile
121 West Election Road
Suite 330
Draper, UT 84020

SL01803C

Agreement Lessee: T-Mobile West Corporation
Agreement Geographic Area: Utah, Idaho, Wyoming
Parcel No. The North 2.0 feet of Lot 25 and all of Lots 26 and 27, Block 18, OAKLEY

Exhibit A

NON-EXCLUSIVE PREMISES LEASE AGREEMENT

PacifiCorp, an Oregon corporation ("Lessor") and **T-Mobile West Corporation**, a Delaware corporation ("Lessee"), enter into this PREMISES LEASE AGREEMENT ("Premises Lease") this day of ,

In consideration of the mutual terms, covenants, and conditions contained in this Premises Lease and in the Master Lease between the parties dated April 1, 1997, which is incorporated herein by reference, and to which this Premises Lease is subject, the parties agree as follows:

1. **Lease**: Lessor leases to Lessee the Premises described on Exhibit 1 attached hereto: Lessor has possession of the Site pursuant to [indicate]:

[ ] Conveyance of title
[X] Lease of fee ground
[ ] Permit, license, or easement from_____

2. **Term**: The term of this Premises Lease shall be thirty (30) years commencing on 1st day of Aug, 2006, and shall run until 31st day of July, 2036, subject to the conditions and provisions set forth in the. Master Lease and this Premises Lease.

3. **Rent**: During the term of this Premises Lease, Lessee shall pay Basic Rent to Lessor in the initial amount of Sixty Fifty DOLLARS ($65.00) per year, to be increased as provided in the Master Lease, together with the additional rent described in Section 4 of the Master Lease. If Lessee is responsible to construct Improvements under Section 5(b) of the Master Lease and Section 4 of this Premises Lease, Lessee's obligation to pay Basic Rent shall commence on the date Lessee commences construction. If Lessor is responsible to construct Improvements under Section 5 of the Master Lease and Section 4 of this Premises Lease, Lessee's obligation to pay Basic Rent shall commence on the date on which Lessor notifies Lessee of the completion of construction. Lessee also agrees to reimburse Lessor for any reasonable expenses (using Lessor's standard rate plan for such charges) incurred by Lessor relating to Lessee's inspection, testing, use, or occupancy of the Premises, or activities preparatory to or constituting construction of Improvements or attachment of Equipment to Improvements on the Premises, regardless of whether Lessee terminates this Premises Lease prior to expiration of the term thereof.

4. **Improvements**: The following described Improvements are in existence or will be constructed on the Premises: [describe monopole, antenna tower type, height, manufacturer, and model number, as well as other Improvements:_See section 5: Equipment_____

If the Improvements are to be constructed on the Premises, Lessee shall be responsible for the construction. If Lessor is responsible for the construction, the Construction Period shall be N/A weeks, commencing upon the date on which all necessary Governmental Approvals are obtained; provided, however, if Lessor encounters unanticipated delays through no fault of Lessor, the parties agree to extend the construction period.

5. Equipment: Lessee may use the following Equipment on the Premises: (Describe transmitters and receivers [with operating frequencies for each], and other personal property)

Antennas: 3 – EMS TR65-19-02DPL2Q Antennas with the following
frequencies: *Receive: 1850-1865MHz* *Transmit: 1930-1945 MHz*
Coax Cable: 18 runs of 7/8" Andrew AVA coax cable.

6. **Addresses**: For purposes of payment of rent and giving notice, the parties' addresses and telephone numbers are as follows:

Lessor:	Lessee:
Address : PacifiCorp 1407 West North Temple Salt Lake City, Utah 84140	T-Mobile USA Corporation 12920 SE 38th St. Bellevue, WA 98006 Attn: PCS Lease Admin. With a copy to: Attn. Legal With another copy to: T-Mobile West Corp. 2601 W. Broadway Rd. Tempe, AZ 85282 Attn: Lease Administration Manager
Telephone: 801-220-2000	602-643-3548
Fax _____	602-643-3503

IN WITNESS WHEREOF, the parties have executed this Premises Lease as of the date stated above.

PacifiCorp

By _____

Title _____

T-Mobile West Corporation

By _____

Title: Area Director, Engineering

STATE OF Oregon)
:ss
COUNTY OF Multnomah)

On the 1 day of August, 2006, Kathleen Hill personally appeared before me, known by me to be the signer of the foregoing document, who duly acknowledged to me that he executed the same for and on behalf of PacifiCorp as its Real Estate Manager

OFFICIAL SEAL
JENNIFER A MULALLEY
NOTARY PUBLIC-OREGON
COMMISSION NO. 401157
MY COMMISSION EXPIRES MARCH 17, 2010

Notary Public

Residing at 825 NE Multnomah St.
Portland, OR 97232

My commission expires:

3/17/10

STATE OF AZ)
:ss
COUNTY OF Maricopa)

On the 8 day of June, 2006, Wayne Leuck personally appeared before me, known by me to be the signer of the foregoing document, who duly acknowledged to me that he executed the same for and on behalf of T-Mobile West Corporation as its Area Director, Engineering.

Babette A. Mayo
Notary Public

Residing at Maricopa

My commission expires:

3/29/09

Exhibit 1

Description of Premises

The Premises that are the subject of the Premises Lease to which this Exhibit 1 is attached are located in Salt Lake County, State of Utah at the Site location of 1219 West, 1000 North, Salt Lake City, UT 84108; as more particularly described as follows:

The North 2.0 feet of Lot 25 and all of Lots 26 and 27, Block 18, OAKLEY, according to the official plat thereof on file and of record in the office of the Salt Lake County Recorder.

Together with ½ the vacated alley abutting on the West.

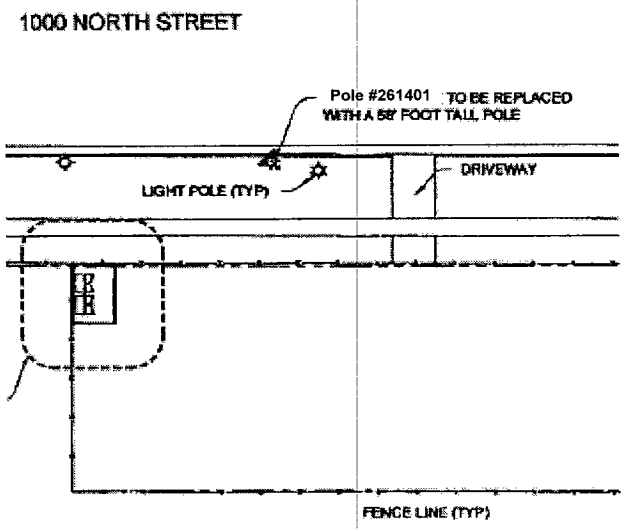

Exhibit B

Leased Premises

Pole Number: 261401

Exhibit C

MEMORANDUM OF LEASE

This is a Memorandum of Lease of a Master Lease and Premises Lease between **PacifiCorp**, whose address is 1407 West North Temple, S.L.C., Utah, as Lessor, and **T-Mobile West Corporation,** whose address is 12920 SE 38th St., Bellevue, WA 98006 as Lessee.

Date of Master Lease: April 1st 1997

Date of Premises Lease: Aug 1, 2006

Description of Premises. See Exhibit 1 attached hereto.

Length of Term: 30 years

Commencement Date: Aug 1, 2006

Renewal Options: 5 Five year terms

The purpose of this Memorandum of Lease is to give record notice of the Master Lease and the Premises Lease and of the rights created thereby, all of which are hereby confirmed and incorporated herein.

EXECUTED as of the dates set forth in the respective acknowledgments of the parties.

PacifiCorp

By _____

Title Real Estate Manager

T-Mobile West Corporation

By _____

Title: Area Director, Engineering

STATE OF Oregon)
:ss
COUNTY OF Multnomah)

On the 1 day of August, 2006, Katherine Hill personally appeared before me, known by me to be the signer of the foregoing document, who duly acknowledged to me that he executed the same for and on behalf of PacifiCorp as its Real Estate Manager

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Notary Public

Residing at Maricopa

My commission expires:
3/29/09

ATTACHMENT D: ANTENNA ZONING STANDARDS

21A.40.090.E.2.g – Zoning requirements for utility pole mounted antennas.

g. Utility Pole Mounted Antenna: Antennas on utility poles and associated electrical equipment shall be allowed subject to the following standards:

Regulation	Proposal	Compliance
(1) Antennas: (A) The antennas shall be located either on an existing utility pole or on a replacement pole in the public right-of-way, or in a rear yard utility easement.	The antenna array will be located on an existing Rocky Mountain Power pole that's located in the public right-of-way in front of a residential property.	Complies
(B) On an existing pole, the antennas shall not extend more than ten feet (10') above the top of the pole.	As illustrated on Sheet A-3 of the applicant's plan set, the antennas will not be any taller than the existing utility pole that is 60 feet tall.	Complies
(C) The antennas, including the mounting structure, shall not exceed thirty inches (30") in diameter to be considered a permitted use. Antennas with an outside diameter greater than thirty inches (30") shall be a conditional use.	The diameter of the proposed antenna array is 39 inches.	Does not comply – must receive conditional use approval for proposed array with diameter larger than 30 inches.
(D) Antennas located in the public right-of-way shall be a permitted use and shall comply with the standards listed above.	The antenna array will be located in a public-right-of-way.	Complies
(E) Conditional use approval is required for antennas located in a rear yard utility easement in all residential, CN Neighborhood Commercial, PL Public Lands, PL-2 Public Lands, CB Community Business, I Institutional, and OS Open Space Zoning Districts. Antennas located in a rear yard utility easement in all other zoning districts shall be a permitted use and shall comply with the standards listed above.	The antenna array is not located in a rear yard utility easement.	Complies
(2) General Provisions: (A)The application shall include the signature of the authorized agent of the owner of the utility pole.	Have obtained Rocky Mountain Power's authorization. Lease agreement with PacifiCorp attached with application materials.	Complies

(B) Antennas and equipment boxes on the utility poles shall be painted to match the pole to which it is attached to minimize visual impacts.	The existing equipment boxes are painted a neutral color.	Complies
(C) Generators or noise producing venting systems shall not be used.	No generators or noise venting systems are being proposed.	Complies
(D) Lighting for aircraft is prohibited except where required by Federal law.	No lighting for aircraft is being proposed.	Complies
(E) Electrical and utility cables between the utility pole and electrical boxes shall be placed underground.	No overhead cables are being proposed.	Complies
(F) Facilities in the public right-of-way shall be subject to any applicable franchise fees or lease agreements required by the City.	City Real Estate Services has indicated that the pole is under Rocky Mountain Power's franchise agreement and no telecom permit is required. The applicant shall comply with all other department/division requirements per the building permit process.	Complies

ATTACHMENT E: CONDITIONAL USE STANDARDS

Approval Standards: A conditional use shall be approved unless the planning commission, or in the case of administrative conditional uses, the planning director or designee, concludes that the following standards cannot be met:

1. *The use complies with applicable provisions of this title;*

   Analysis: The subject site is located in the R-1-5,000: Single-Family Residential zoning district. Per Section 21A.40.090.E of the Zoning Ordinance, utility pole mounted antennas are permitted in any zoning district subject to meeting all of the other listed requirements. These requirements specify that an array on a utility pole with a diameter of 30 inches or less is permitted outright; however, if the diameter is greater than 30 inches, it must be processed as a conditional use.

   This intent of limiting the diameter this way allows for some oversite of the size of the array so that is doesn't become a visual nuisance or structural hazard. The diameter of the proposed antenna array is approximately 39 inches – 9 inches greater than what would be permitted by right, which would not make it an extreme visual nuisance or structurally unsound as opposed to what's permitted by right.

   Finding: The proposal complies with the applicable provisions of the Salt Lake City Zoning Ordinance by going through the conditional use process.

2. *The use is compatible, or with conditions of approval can be made compatible, with surrounding uses;*

   Analysis: Surrounding the subject site are single-family homes, a large open lot to the east and an elementary school to the south. There are also multiple power poles located on right-of-ways in the neighborhood and the existing pole has and existing antenna array.

   Finding: Staff finds that wireless antennas are commonly found on utility poles in both commercial and residential areas and this array is proposed to become smaller to have less of a visual impact on the surrounding uses and, in general, is compatible with the area.

3. *The use is consistent with applicable adopted city planning policies, documents, and master plans; and*

   Analysis: The Westside Master Plan is silent on matters related to wireless telecommunication equipment.

   Finding: The project does not conflict the Westside Master Plan.

4. *The anticipated detrimental effects of a proposed use can be mitigated by the imposition of reasonable conditions* (refer to Detrimental Impacts Chart below for details).

21a.54.080B Detrimental Effects Determination

In analyzing the anticipated detrimental effects of a proposed use, the planning commission shall determine compliance with each of the following:

Criteria	Finding	Rationale
1. This title specifically authorizes the use where it is located	**Complies**	A utility mounted antenna arrays with a diameter larger than 30 inches is permitted in the R-1-5,000 zoning district as a conditional use.
2. The use is consistent with applicable policies set forth in adopted citywide, community, and small area master plans and future land use maps	**Complies**	The use on the lot associated with the right-of-way where the utility pole is located is a single-family home, which will remain the same no matter the antenna installation. The Westside Master Plan is silent on matters related to wireless telecommunication equipment.
3. The use is well-suited to the character of the site, and adjacent uses as shown by an analysis of the intensity, size, and scale of the use compared to existing uses in the surrounding area	**Generally complies**	Surrounding the property are low-density residential uses and a school. Though highly visible, the utility pole is sited in the public right-of-way where utility poles are typically found in commercial and residential districts alike. The applicant has also indicated that the modified array will accommodate "faster data speeds and more data capacity to surrounding cell customers" in this neighborhood.
4. The mass, scale, style, design, and architectural detailing of the surrounding structures as they relate to the proposed have been considered	**Generally complies**	The antenna array will be highly visible. However, the utility pole is existing and the diameter of the proposed array is 9 inches greater than what would normally be permitted outright, which doesn't significantly alter its appearance from the ground. The ground mounted equipment is also existing and setback on the lot. In general, one may expect to see some utilitarian equipment in a residential neighborhood that provide different services to the many residences that live there.
5. Access points and driveways are designed to minimize grading of natural topography, direct vehicular traffic onto major streets, and not impede traffic flows	**Complies**	The proposal will have no traffic impact.
6. The internal circulation system is designed to mitigate adverse impacts on adjacent property from motorized, non-motorized, and pedestrian traffic	**Complies**	The proposal will have no traffic impact.
7. The site is designed to enable access and circulation for pedestrian and bicycles	**Complies**	The proposal will have no traffic impact.
8. Access to the site does not unreasonably impact the service level of any abutting or adjacent street	**Complies**	The proposal will have no traffic impact.
9. The location and design of off-street parking complies with applicable standards of this code	**Complies**	The proposal will not require additional off-street parking.
10. Utility capacity is sufficient to support the use at normal service levels	**Complies**	The proposal will not require additional utility service.
11. The use is appropriately screened, buffered, or separated from adjoining dissimilar uses to mitigate potential use conflicts	**Complies**	The proposal will not change the land use. The existing ground mounted utility equipment on the site is fenced in and painted a neutral color for discretion.
12. The use meets City sustainability plans, does not significantly impact the quality of surrounding air and water, encroach into a river or stream, or introduce any hazard or environmental damage to any adjacent property, including cigarette smoke	**Complies**	Use does not significantly impact sustainability plans nor does it encroach onto a stream or water way.
13. The hours of operation and delivery of the use are compatible with surrounding uses	**Complies**	The proposal will not have operating hours and is an unmanned use.
14. Signs and lighting are compatible with, and do not negatively impact surrounding uses	**Complies**	The proposal will not require signs and lighting.
15. The proposed use does not undermine preservation of historic resources and structures	**Complies**	The site is outside of any designated historic district, and therefore not subject to his criteria.

Finding: In analyzing the anticipated detrimental effects of the proposed use, Staff finds that the request complies with the criteria listed above.

Section 21A.40.090.E.9 Additional Conditional Use Requirements (for antennas)
In addition to conditional use standards outlined in Section 21A.54 (above) of the zoning ordinance; the following shall be considered by the Planning Commission:

a. Compatibility of the proposed structure with the height and mass of existing buildings and utility structures;
b. Whether collocation of the antenna on the other existing structures in the same vicinity such as other towers, buildings, water towers, utility poles, etc., is possible without significantly impacting antenna transmission or reception;
c. The location of the antenna in relation to existing vegetation, topography and buildings to obtain the best visual screening;
d. Whether the spacing between monopoles and lattice towers creates detrimental impacts to adjoining properties.

Analysis: The utility pole is existing and similar in height to other poles in the City. The ground mounted equipment is setback from the public right-of-way and fenced in on the residential property.

Finding: This project satisfies the additional requirements of Section 21A.40.090.E.7.

ATTACHMENT F: PUBLIC PROCESS AND COMMENTS

Public Notice and Comments
The following is a list of public notices that were sent related to the proposed project:

- Notice of the project and request for comments sent to the Chairs of the Poplar Grove and Glendale Community Councils on August 1st, 2018.
- These Community Councils chose did not request to have the applicant or staff attend a regular meeting to explain the proposal. No comments were submitted by the Community Councils to date related to this proposal.
- Staff also sent an early notification letter explaining the proposal to property owners and tenants within 300 feet of the site on August 2nd, 2018 (see mailing list and letter attached). No comments were submitted by the public.

Notice of the public hearing for the proposal included:

- Public hearing notice mailed on: November 1, 2018
- Public hearing notice sign posted on property: November 1, 2018
- Public notice posted on City and State websites and Planning Division list serve: November 8, 2018

Public Input:
As of the date of this staff report, no public comments have been received in relation to the proposal.

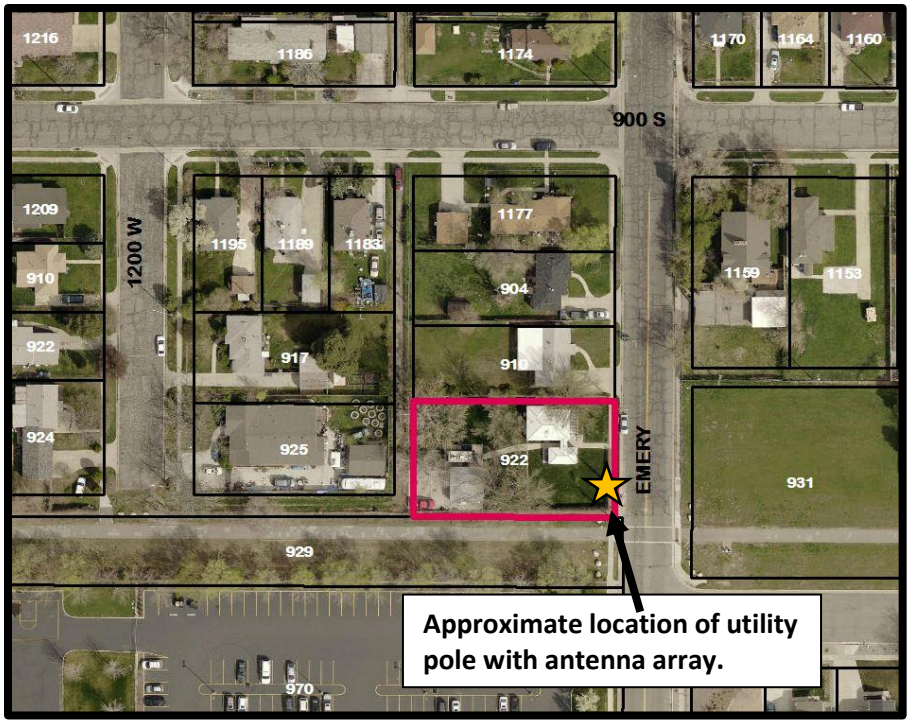
August 2nd, 2018

Early Notification of Proposed Conditional Use

Salt Lake City has received a Conditional Use request from T-Mobile, represented by Kalab Cox, in order to increase the size – or the diameter in particular – of an existing antenna array mounted on a utility pole from 30 inches to 45 inches in the public right-of-way at 922 S. Emery Street. Salt Lake City's Zoning Code allows antenna arrays to be mounted on utility poles if the arrays have a diameter of 30 inches or less, but anything larger is required to be reviewed as a conditional use. The number of existing antennas will not change (six total), but three of the replacement antennas will be slightly larger to accommodate faster data speeds/more data capacity to surrounding cell customers. The subject property is located in the R-1-5,000: Single-Family Residential zoning district where utility pole-mounted antennas are allowed in the public right-of-way.

This type of application requires approval from the Administrative Hearing Officer. A hearing with the Administrative Hearing Officer has not been scheduled – you will be notified of the public hearing at a later date.

The purpose of this notice is to make you aware of the proposed project and let you know how you may obtain more information about/comment on the project early on in the review process. Additionally, notice of this application has been sent to the Poplar Grove and Glendale Community Council Chairs. If you would like additional information, please contact the project planner Lauren Parisi at (801) 535-7226 or lauren.parisi@slcgov.com. (Case number: PLNPCM2018-00585)



V & K INVESTMENTS, LLC
260 S CLUB HOUSE CT
NORTH SALT LAKE, UT 84054

BOARD OF EDUCATION
440 E 100 S
SALT LAKE CITY, UT 84111-1898

MIGOLI, VICTORIA; JT MIGOLI, MANNISULI; JT
873 S 1200 W
SALT LAKE CITY, UT 84104-2747

RASMUSSEN, MICHAEL S
910 S 1200 W
SALT LAKE CITY, UT 84104-2748

SEIDEL, GUY C
917 S 1200 W
SALT LAKE CITY, UT 84104-2749

DIAZ, MIGUEL & JOSE; JT
922 S 1200 W
SALT LAKE CITY, UT 84104-2748

FRYER, JOHN
924 S 1200 W
SALT LAKE CITY, UT 84104-2748

HEAGREN, DANNY L
925 S 1200 W
SALT LAKE CITY, UT 84104-2749

NEMELKA, MICHAEL & GLORIA; JT
1147 W 900 S
SALT LAKE CITY, UT 84104-2442

WRIGHT, BRYAN & BRYAN DEE; TC
1158 W 900 S
SALT LAKE CITY, UT 84104-2443

PEREZ-GARCIA, DELFINO J
1160 W 900 S
SALT LAKE CITY, UT 84104-2443

DIANSONGI, SAMUEL N & ELIZABETH BANZUZI; JT
1164 W 900 S
SALT LAKE CITY, UT 84104-2443

FAUSETT, TERRY
1170 W 900 S
SALT LAKE CITY, UT 84104-2443

JACKSON, ROBERT D
1174 W 900 S
SALT LAKE CITY, UT 84104-2445

CORDOVA, LILLIE R
1177 W 900 S
SALT LAKE CITY, UT 84104-2444

RODRIGUEZ, ROSA; 1/2 INT RODRIGUEZ, ROSA T; 1/2 INT
1183 W 900 S
SALT LAKE CITY, UT 84104-2444

SOTO, DEMETRIO
1186 W 900 S
SALT LAKE CITY, UT 84104-2445

MCALLISTER, HEATHER LYN & DANIEL LEON; JT
1189 W 900 S
SALT LAKE CITY, UT 84104-2444

GUSTAFSON, GERRY L
1195 W 900 S
SALT LAKE CITY, UT 84104-2444

MIRANDA, JUAN C & LUCY A; JT
1216 W 900 S
SALT LAKE CITY, UT 84104-2729

DYER, DEREK
2072 E ATKIN AVE
SALT LAKE CITY, UT 84109-1902

PARRISH, REID M; ET AL
866 S EMERY ST
SALT LAKE CITY, UT 84104-2451

TAYLOR, MISTY
904 S EMERY ST
SALT LAKE CITY, UT 84104-2050

HERNANDEZ, XOCHITILIA
910 S EMERY ST
SALT LAKE CITY, UT 84104-2050

GAFFNEY, JOYCE S
922 S EMERY ST
SALT LAKE CITY, UT 84104-2050

LAWLOR, JACOB S
904 S GLENDALE ST
SALT LAKE CITY, UT 84104-2058

BOLTON, MICHELE S
924 S GLENDALE ST
SALT LAKE CITY, UT 84104-2058

MCCREADY, CELIA J
1151 W HAYES AVE
SALT LAKE CITY, UT 84104-2075

WRIGHT, ANDREW SCOTT
1153 W HAYES AVE
SALT LAKE CITY, UT 84104-2075

MC CARTNEY, SALLY D
1155 W HAYES AVE
SALT LAKE CITY, UT 84104-2075

Resident
1159 W 900 S
Salt Lake City, UT 84104-2442

LAMALFA, KYLE
1145 E LAIRD AVE
SALT LAKE CITY, UT 84105-1907

SALT LAKE CITY CORPORATION
PO BOX 145460
SALT LAKE CITY, UT 84114-5460

Resident
926 S GLENDALE ST
Salt Lake City, UT 84104-2058

CRESTVIEW HOLDINGS, LLC
PO BOX 57845
SALT LAKE CITY, UT 84157-0845

BJSP HOLDINGS, LLC
2543 E 9800 S
SANDY, UT 84092-4245

Resident
865 S 1200 W
Salt Lake City, UT 84104-2747

Resident
874 S EMERY ST
Salt Lake City, UT 84104-2451

Resident
1209 W 900 S
Salt Lake City, UT 84104-2730

Resident
970 S EMERY ST
Salt Lake City, UT 84104

ATTACHMENT G: CITY REVIEW COMMENTS

Engineering (Scott Weiler) – Engineering has the following objections to approval of the proposed conditional use:
T-Mobile doesn't have a franchise agreement with SLC Corp.
[Real Estate Services has indicated the pole is under the Rocky Mountain Power franchised agreement]
What was installed in the public way, doesn't match the plans submitted to SLC Building Services relative to the number of poles as well as the size of the antenna.

Fire (Kenney Christensen) – Fire would have NO objections to the conditional use request PLNPCM2018-00585, to increase the size – or the diameter in particular – of an existing antenna array 30 inches to 45 inches that's mounted on a utility pole in the public right-of-way at 922 S. Emery Street. The number of existing antennas will not change (six total), but three of the replacement antennas will be slightly larger. No new ground mounted utility boxes will need to be installed to accommodate the antenna replacements.

Real Estate Services (Daniel Rip) – The pole is there under the RMP [Rocky Mountain Power] franchise agreement (see agreement attached).

Transportation (Michael Barry) – No issues from transportation.

Zoning (Alan Hardman) – No zoning comments to add per our discussion.