



410 East 5th Street
Loveland, Colorado
970.962.2523

FINAL FINDINGS REPORT

310 South Cleveland Avenue Special Review #950 (PZ #18-00189)

January 24, 2019

TITLE: 310 South Cleveland Avenue – Special Review #950

LOCATION: Located on the East side of South Cleveland, south of 4th Street Southeast.

APPLICANT: Ryan Sagar – LRK Consulting LLC

STAFF CONTACT: Emily Tarantini, Current Planning
Suzette Schaff, Stormwater
Mark Warner, Power
Ingrid McMillan-Ernst, Fire

APPLICATION TYPE: Special Review #950

STAFF RECOMMENDATION: Staff recommends that the Current Planning Manager approve a Type 2 Zoning Permit for 310 South Cleveland Avenue, described in this report dated January 24, 2019.

I. ATTACHMENTS

1. Vicinity Map
2. Special Review/Site Development Plan

II. SITE DATA

EXISTING USE Commercial/Vehicle Repair

PROPOSED USE To remain the same with the installation of small cell in the form of a flag pole

EXISTING ZONING AREA (acres) DT– Downtown (1 acre/43,560 square feet)

EXISTING ADJACENT ZONING & USE- North DT– Downtown

EXISTING ADJACENT ZONING & USE – East DT– Downtown

EXISTING ADJACENT ZONING & USE- South DT– Downtown

EXISTING ADJACENT ZONING & USE - West I– Developing Industrial

UTILITY SERVICE – WATER City of Loveland

UTILITY SERVICE – SEWER City of Loveland

UTILITY SERVICE – ELECTRIC City of Loveland

III. PROJECT DESCRIPTION

The applicant is proposing to replace the existing 20’ flag pole with a new 30’ flag pole with a concealed antenna at the top of the pole located at 310 South Cleveland Avenue. The proposed flag pole with concealed antenna, and new ground equipment will be located within the parking lot/ vehicle storage area of the existing business. The new flag pole with concealed antenna and ground equipment will be utilizing the existing fence to screen the ground equipment and a portion of the pole. The proposed use of a small cell pole is permitted through the approval of a special review. The special review application includes a review of the site plan by the City for conformance to all applicable standards, input from the surrounding property owners and findings of compatibility within the neighborhood.

IV. KEY ISSUES

Staff has not identified key issues associated with this special review application in terms of compliance with the Municipal Code. There were no members of the neighborhood present at the neighborhood meeting.

V. BACKGROUND

The zoning on the property is DT-Downtown, uses on the site have remained the same over the years as light industrial and commercial uses.

The most recent building permit is dated from 1993 for the Corbett Auto business.

VI. STAFF, APPLICANT, AND NEIGHBORHOOD INTERACTION

A. Notification

A letter advertising the neighborhood meeting was sent out by applicant Ryan Sagar, on December 19, 2018 to all neighbors within the “Neighborhood” as defined in Section 18.40.010.C of the Loveland Municipal Code. Meeting notice signs were posted on the property on December 19, 2018.

B. Neighborhood Response

A neighborhood meeting was held on **January 3, 2019**, regarding this project. The applicant, and City staff were in attendance, however no members of the neighborhood attended the meeting and there have been no inquiries on the proposed project.

C. Project Schedule

1. Type 2 Special Review #950 was filed with the Current Planning Department on **November 14, 2018**.

2. A neighborhood meeting was held on **January 3, 2019**, at 5:30 p.m. at the Gertrude Scott Room, Loveland Public Library (300 N Adams Avenue Loveland, CO 80537)

3. The staff preliminary findings and determination was posted on **January 14, 2019**.

4. The public review period for the staff preliminary findings and determinations is from **January 14, 2019** to **January 23, 2019**.

5. Final findings and determination will be issued on **January 24, 2019**.

5. The appeal period for the Type 2 Special Review #950 is from **January 24, 2019** to **February 4, 2019**.

VII. FINDINGS AND ANALYSIS

Finding 1. That the proposed special review use meets the purposes set forth in Section 18.04.010 of the Loveland Municipal Code.

The special review meets the purposes of Section 18.04.010 of the Loveland Municipal Code in that it is designed to adhere to the zoning regulations and districts established in Title 18 and more particularly those for the DT district including but not limited to providing adequate facilities (i.e. transportation, water, sewer, power, etc.), appropriate use of land, and keeping with the character of the land.

Finding 2. That the effects of the proposed special review use on the surrounding neighborhood and the public in general will be ameliorated.

The proposed small cell pole is replacing an existing flag pole in the same location and style, the ground equipment is screened from the view of the public.

Finding 3. That in assessing the potential effects of the proposed special review use, at a minimum, the following matters have been considered:

3a. Type, size, amount, and placement of landscaping;

Landscaping is not being proposed with this special review, there is no existing landscaping on the site and ground equipment will be located behind the existing fence.

3b. Height, size, placement, and number of signs;

No signage is proposed with this special review.

3c. Use, location, number, height, size, architectural design, materials, and colors of buildings;

No additional building structures are being proposed with this project.

3d. Configuration and placement of vehicular and pedestrian access and circulation;

Not applicable.

3e. Amount and configuration of parking;

The site currently offers ample parking, there is no proposal for additional parking.

3f. Amount, placement, and intensity of lighting;

Lighting is not being proposed with this project.

3g. Hours of operation;

Not applicable.

3h. Emissions of noise, dust, fumes, glare, and other pollutants.

Not applicable.

Finding 4. Except as may be varied in accordance with this special review permit, the special review site plan conforms to the restrictions and regulations set forth in the Loveland Municipal Code for the zoning district in which the special review use is located.

The proposed special review meets this finding. The proposed small cell pole is being disguised as a flag pole while the ground equipment is being screened by the existing fencing..

Finding 5. The special review site plan meets the requirements set forth in Section 16. 41 - Adequate Community Services - of the Loveland Municipal Code.

Transportation:

TDR has reviewed the FTC application and a finding has been made that the proposed tower installation will have an insignificant impact on the City’s transportation network.

Fire: Staff believes that this finding can be met, due to the following:

- The development site will comply with the requirements in the ACF Ordinance for response distance requirements from the first due Engine Company.
- The proposed enclosed cell tower facility will not negatively impact fire protection for the subject development or surrounding properties.

Water/Wastewater: Staff believes that this finding can be met, due to the following:

- The proposed development will not negatively impact City water and wastewater facilities.
- The proposed public facilities and services are adequate and consistent with the City’s utility planning and provides for efficient and cost-effective delivery of City water and wastewater service.

Stormwater: Staff believes that this finding can be met, due to the following:

- This special review site plan and the site development plan comply with the Adequate Community Facilities standards set forth in the Loveland Municipal Code, Section 16.41.140.

Power: Staff believes that this finding can be met, due to the following:

- The proposed development will not negatively impact City power facilities.
- The proposed public facilities and services are adequate and consistent with the City’s utility planning and provides for efficient and cost-effective delivery of City power.

VIII. CONDITIONS OF APPROVAL

1.

PW-Transportation:

-ROW Work Permit from the Public Works Engineering Division prior to starting the work.

Attachment 1: Vicinity Map

VICINITY MAP



Attachment 2: Special Review/Site Development Plan

Attachment 2: Special Review/Site Development Plan

SITE PLAN CERTIFICATION

PROPERTY OWNER

1

THE UNDERSIGNED AGREE THAT THE REAL PROPERTY DESCRIBED IN THE APPLICATION FOR SPECIAL REVIEW FILED HERewith AND AS SHOWN ON THE SITE PLAN, SHALL BE SUBJECT TO THE REQUIREMENTS OF CHAPTER 18.40 OF THE MUNICIPAL CODE OF THE CITY OF LOVELAND, COLORADO, AND ANY OTHER ORDINANCES OF THE CITY OF LOVELAND THERETO. THE UNDERSIGNED ALSO UNDERSTANDS THAT IF CONSTRUCTION OF ALL IMPROVEMENTS IS NOT COMPLETED AND IF THE SPECIAL REVIEW USES ARE NOT ESTABLISHED WITHIN THREE YEARS OF THE DATE OF APPROVAL, OR OTHER COMPLETION DATE OR DATES ESTABLISHED IN A DEVELOPMENT AGREEMENT APPROVED BY THE CITY, THE CITY MAY TAKE AN ACTION TO DECLARE THE PERMIT AND SPECIAL REVIEW PLANS ABANDONED AND NULL AND VOID.

STATE OF COLORADO)
) SS.
 COUNTY OF LARIMER)

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, A.D., 20____.

BY _____

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC

CURRENT PLANNING MANAGER APPROVAL CERTIFICATE
 THIS SPECIAL REVIEW IS APPROVED, SUBJECT TO ALL CONDITIONS SET FORTH HEREON, BY THE CURRENT PLANNING MANAGER OF THE CITY OF LOVELAND, LARIMER COUNTY, COLORADO, THIS _____ DAY OF _____, 20____.

CURRENT PLANNING MANAGER _____



SMALL CELL NSB
314 S CLEVELAND AVE
LOVELAND, COLORADO 80537
CONSTRUCTION DRAWINGS



AERO PROJECT #: 097-16-0165

REVISION SCHEDULE			
REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

SITE DIRECTIONS

FROM SOUTH VAUGHN WAY, MERGE ONTO I-225 N, TAKE EXIT 12A TO MERGE ONTO I-70 W, KEEP RIGHT AT THE FORK TO CONTINUE ON I-270 W, TAKE EXIT 0 TO MERGE ONTO I-25 N TOWARDS FT. COLLINS, TAKE EXIT 255 FOR CO-402 W TOWARD LOVELAND, TURN LEFT ONTO CO-402 W/14TH ST, TURN RIGHT ONTO US 287 N/ S LINCOLN AVE, TURN LEFT ONTO SOUTHEAST 3RD STREET, AND SITE WILL BE ON YOUR LEFT.

CLIENT

VERIZON WIRELESS REAL ESTATE
 9656 S. PROSPERITY RD
 WEST JORDAN, UT 84088
 CONTACT: BRANDON KISER
 PHONE: 801-260-8700

PROJECT DATA

JURISDICTION: CITY OF LOVELAND
 ZONING: BE- ESTABLISHED CENTRAL BUSINESS
 APN: 9524200007
 PARCEL SIZE: 46,560 SQ. FT.
 ELEVATION: 4944 (NAVD 88)
 STRUCTURE TYPE: FLAG POLE SMALL CELL
 STRUCTURE HEIGHT: 30'-0"± (TOP OF PROPOSED POLE)
 ANTENNA RAD CENTER: 28'-0"

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PROPERTY OWNER

BAC LOVELAND HOLDINGS LLC
 314 S CLEVELAND AVE
 LOVELAND, CO 80537
 CONTACT: BILL CORBETT
 PHONE: 970-481-5976

CONSTRUCTION MANAGER

CONTACT: KENT McDERMOTT
 EMAIL: KENT.McDERMOTT@VERIZONWIRELESS.COM

APPLICANT CONTACT: BRANDON KISER
 9656 S. PROSPERITY RD
 WEST JORDAN, UT 84088
 PH: 801-260-8700

ENGINEERING: AERO SOLUTIONS, LLC

ENGINEERING CONTACT: MATT FLECK
 5555 CENTRAL AVENUE #100
 BOULDER, COLORADO 80301
 PH: 720 279-8973

RF ENGINEER

VERIZON WIRELESS
 3131 S. VAUGHN WAY #550
 AURORA, CO 80014
 CONTACT: RAM NANDIRAJU
 EMAIL: Ram.Nandiraju@verizonwireless.com

CODE ANALYSIS

BUILDING CODE: IBC 2012 (W/ LOCAL AMENDMENTS)
 ELECTRICAL CODE: NEC 2014
 FIRE SAFETY CODE: NFPA-1 (2006)
 USE GROUP: U - UTILITY
 CONSTRUCTION TYPE: IIB

SITE ACQUISITION

LRK CONSULTING
 1196 GRANT STREET, UNIT 313
 DENVER, CO 80203
 CONTACT: RYAN SAGAR
 PNE: 219-477-0099

APPROVALS

VERIZON (RF): _____ DATE: _____

VERIZON (CONST.): _____ DATE: _____

VERIZON (RE): _____ DATE: _____

LANDLORD: _____ DATE: _____

VICINITY MAP



DRAWING TITLE:

TITLE SHEET

DRAWING SHEET:

T-1

SHEET NUMBER:

1 OF 14

SITE INFORMATION:

SITE NAME:
FTC SOUTH LOVELAND SC

SITE ADDRESS:
314 S CLEVELAND AVE
LOVELAND, CO 80537

JURISDICTION:
CITY OF LOVELAND

JOSHUA D. ROZINA, P.E.
 COLORADO PROFESSIONAL ENGINEER
 LICENSE #53217 (EXP. 10/31/2019)

GENERAL NOTES:

- THIS PLAN WAS PREPARED USING AN APPROVED SURVEY PLAN ENTITLED "BOUNDARY DETAIL" BY RLF CONSULTING, DATED 06/01/18.
- THE PROPOSED FACILITY WILL CAUSE "DE MINIMIS" INCREASE IN STORMWATER RUNOFF. THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
- NO NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
- THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. (THERE IS NO HANDICAP ACCESS REQUIRED).
- THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
- ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988).
- THE PROPOSED DEVELOPMENT DOES NOT INCLUDE STREET SIGNS OF ANY TYPE.
- THE PROPOSED DEVELOPMENT DOES NOT INCLUDE OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES. ANY WORK ASSOCIATED WITH THE ROOFING MEMBRANE SUCH AS ANCHORAGE, CONDUIT PLACEMENT, ADDED ISOLATION PADS, ETC. MUST BE INSTALLED BY A ROOFER THAT IS APPROVED BY THE MANUFACTURER OF THE INSTALLED ROOF MEMBRANE.
- ACCESS SHALL BE MADE VIA PROPER AREAS EITHER THROUGH THE ROOF HATCH.
- FINAL WORK SHALL BE PROPERLY SEALED AND WATERTIGHT.
- RF SIGNAGE TO BE INSTALLED AT ANY/ALL ROOF ACCESS POINTS ON THE BUILDING.

GROUNDING NOTES:

- GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRIC CODE.
- ALL GROUNDING DEVICES SHALL BE U.L. APPROVED OR LISTED FOR THEIR INTENDED USE.
- ALL WIRES SHALL BE AWG THHN/THWN COPPER UNLESS NOTED OTHERWISE.
- GROUND WIRES SHALL BE #2 AWG BARE SOLID COPPER UNLESS NOTED OTHERWISE.
- GROUNDING CONNECTIONS SHALL BE EXOTHERMIC ("CADWELDS") TO GROUND RODS, GROUND RING WIRE, AND FENCE POSTS UNLESS NOTED OTHERWISE. CLEAN SURFACES TO SHINY METAL. WHERE GROUND WIRES ARE CADWELDED TO GALVANIZED SURFACES, SPRAY CADWELD WITH GALVANIZED PAINT.
- GROUNDING CONNECTIONS TO GROUND BARS ARE TO BE TWO-HOLE BRASS MECHANICAL CONNECTORS WITH STAINLESS STEEL HARDWARE (INCLUDING SCREW SET.) CLEAN GROUND BAR TO SHINY METAL AFTER MECHANICAL CONNECTION, TREAT WITH PROTECTIVE ANTIOXIDANT COATING.
- GROUND CABLE SHIELDS AT BOTH ENDS WITH MANUFACTURER'S GROUNDING KITS.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 8" RADIUS.
- PRIOR TO INSTALLING LUGS ON GROUND WIRES, APPLY THOMAS & BETTS KOPR-SHIELD (TM OF JET LUBE, INC.) PRIOR TO BOLTING GROUND WIRE LUGS TO GROUND BARS, APPLY KOPR-SHIELD OR EQUAL.
- PREPARE ALL BONDING SURFACES FOR GROUNDING CONNECTIONS BY REMOVING ALL PAINT AND CORROSION DOWN TO SHINY METAL. FOLLOWING CONNECTION, APPLY APPROPRIATE ANTI-OXIDIZATION PAINT.

ELECTRICAL NOTES:

- CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTORS FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
- LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO ROUGH-IN.
- THE CONDUIT RUNS AS SHOWN ON THE PLANS ARE APPROXIMATE. EXACT LOCATION AND ROUTING SHALL BE PER EXISTING FIELD CONDITIONS.
- PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.
- ALL CONDUITS SHALL BE MET WITH BENDS MADE IN ACCORDANCE WITH NEC CHAPTER 9, TABLE #2. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.
- ALL CONDUIT TERMINATIONS SHALL BE PROVIDED WITH PLASTIC THROAT INSULATING GROUNDING BUSHINGS.
- ALL WIRE SHALL BE TYPE THHN/THWN, SOLID, ANNEALED COPPER UP TO SIZE #10 AWG (#8 AND LARGER SHALL BE CONCENTRIC STRANDED) 75° C (167° F), 98% CONDUCTIVITY, MINIMUM #12.
- ALL WIRES SHALL BE TAGGED AT ALL PULL BOXES, J-BOXES, EQUIPMENT BOXES AND CABINETS WITH APPROVED PLASTIC TAGS, ACTION CRAFT, BRADY, OR APPROVED EQUAL.
- ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
- CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION TO CONFLICTS. VERIFY WITH MECHANICAL CONTRACTOR AND COMPLY AS REQUIRED.
- ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN NOT HAND WRITTEN.
- INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT CABINETS.
- THE CONTRACTOR SHALL PREPARE AS-BUILT DRAWINGS, DOCUMENT ANY AND ALL WIRING AND EQUIPMENT CONDITIONS AND CHANGES WHILE COMPLETING THIS CONTRACT. SUBMIT AT SUBSTANTIAL COMPLETION.
- ALL DISCONNECT SWITCHES AND OTHER CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM (NO EXCEPTIONS.)
- ALL ELECTRICAL DEVICES AND INSTALLATIONS OF THE DEVICES SHALL COMPLY WITH AMERICANS WITH DISABILITIES ACT (ADA) AS ADOPTED BY THE APPLICABLE STATE.
- PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS OR RISERS THROUGH BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS WITHOUT CONSTRUCTION MANAGER'S APPROVAL. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE PACKED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FILL FOR FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.
- ELECTRICAL CHARACTERISTICS OF ALL EQUIPMENT (NEW AND EXISTING) SHALL BE FIELD VERIFIED WITH THE OWNER'S REPRESENTATIVE AND EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN OF CONDUIT AND WIRE. ALL EQUIPMENT SHALL BE PROPERLY CONNECTED ACCORDING TO THE NAMEPLATE DATA FURNISHED ON THE EQUIPMENT (THE DESIGN OF THESE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN AND SOME EQUIPMENT CHARACTERISTICS MAY VARY FROM DESIGN AS SHOWN ON THESE DRAWINGS). LOCATION OF ALL OUTLET, BOXES, ETC., AND THE TYPE OF CONNECTION (PLUG OR DIRECT) SHALL BE CONFIRMED WITH THE OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.

VERIZON COLOR STANDARDS

GRAY-EXISTING EASEMENT		ORANGE-FIBER	
PURPLE #1-LEASE AREA		TAN-ANTENNAS	
BLUE GRAY#1-ACCESS/UTILITY		RED-PENETRATIONS	
BLUE #1-HYBRID CABLES/COAX		UMBER-NEW WORK UTILITY EASEMENT	
BLUE #2-RRHS		GRAY-WALL HATCH	
GREEN-DC POWER		GREY-EXISTING	

LEGEND

WATER LINE		STORM SEWER	
SANITARY SEWER		UG ELECTRIC	
GAS LINE		ELECTRIC	
FIBER LINE		OH TELCO	
OH ELECTRIC		PROPERTY LINE	
UG TELCO		FENCE IRON	
FENCE CLF		UG UTILITIES	
RIGHT OF WAY		OH UTILITIES	
WATER METER		SIGNAGE	
WATER VALVE		CATCH BASIN	
IRRIGATION VALVE		STORM MANHOLE	
SAN SEWER MH		POWER POLE	
TELCO MAN HOLE		TRAFFIC SIGNAL	
LIGHT POLE		ELECTRIC VAULT	
ELEC PULL BOX		ELECTRIC CABINET	
ELECTRIC EQUIP		ELECTRICAL XFMR	
SKYLIGHT		HVAC UNIT	
SECURITY CAMERA		VENT PIPE	
BOLLARD		COMM DISH	



3131 SOUTH VAUGHN WAY #500
AURORA, COLORADO 80014
(303) 873-2652



5555 CENTRAL AVENUE #100
BOULDER, COLORADO 80301
PH: (720) 304-6882
FAX: (720) 304-6883

AERO PROJECT #: 097-16-0165

REVISION SCHEDULE

REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:

GENERAL NOTES

DRAWING SHEET:

GN-1

SHEET NUMBER:

2 OF 14

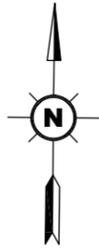
SITE INFORMATION:

SITE NAME:
FTC SOUTH LOVELAND SC

SITE ADDRESS:
314 S CLEVELAND AVE
LOVELAND, CO 80537

JURISDICTION:
CITY OF LOVELAND

JOSHUA D. ROZINA, P.E.
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REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:

SITE PLAN

DRAWING SHEET:

Z-1

SHEET NUMBER:

3 OF 14

SITE INFORMATION:

SITE NAME:
FTC SOUTH LOVELAND SC

SITE ADDRESS:
**314 S CLEVELAND AVE
 LOVELAND, CO 80537**

JURISDICTION:
CITY OF LOVELAND

- PROPOSED 10'-0" WIDE ACCESS & UTILITY EASEMENT
- PROPOSED 2'-0"x3'-0" FIBER VAULT
- PROPOSED QUASI-OMNI ANTENNA MOUNTED TO NEW POLE (SEE DETAIL 2/C-4)
- PROPOSED VERIZON EQUIPMENT CABINET MOUNTED TO CONCRETE PAD (SEE DETAIL 1/C-5)
- EXISTING WOOD FENCE
- PROPOSED 5'-0" WIDE UTILITY EASEMENT

S. CLEVELAND AVE

APN: 9524200005

EXISTING BUILDING (TYP)

72'-11"
TO FACE OF POLE

PROPOSED 10'-0"x10'-0"
VERIZON LEASE AREA

223'-4"

1 SITE PLAN
Z-1 SCALE: 1"=30'-0"

GRAPHIC SCALE



(IN FEET)
 1 inch = 30 ft.

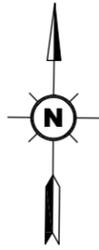
(SCALE BASED ON 11"x17" SHEETS ONLY)
 (DO NOT USE SCALE ON OTHER SIZED DRAWINGS)

EQUIPMENT VOLUME TABLE		
DESCRIPTION:	INCLUDES:	VOLUME (ft ³):
ANTENNA(S)	14"x48" OMNI	4.27
ASSOCIATED EQUIPMENT	CABINET, RADIO(S), POWER PANEL	10.82
UTILITY	METER	0.69
TOTAL		15.78



**Know what's below.
 Call before you dig.**

PROTECT YOURSELF. GIVE THREE WORKING DAYS NOTICE.
 THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPLICABLE.



AERO PROJECT #: 097-16-0165

REVISION SCHEDULE

REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:

SITE PLAN

DRAWING SHEET:

Z-2

SHEET NUMBER:

4 OF 14

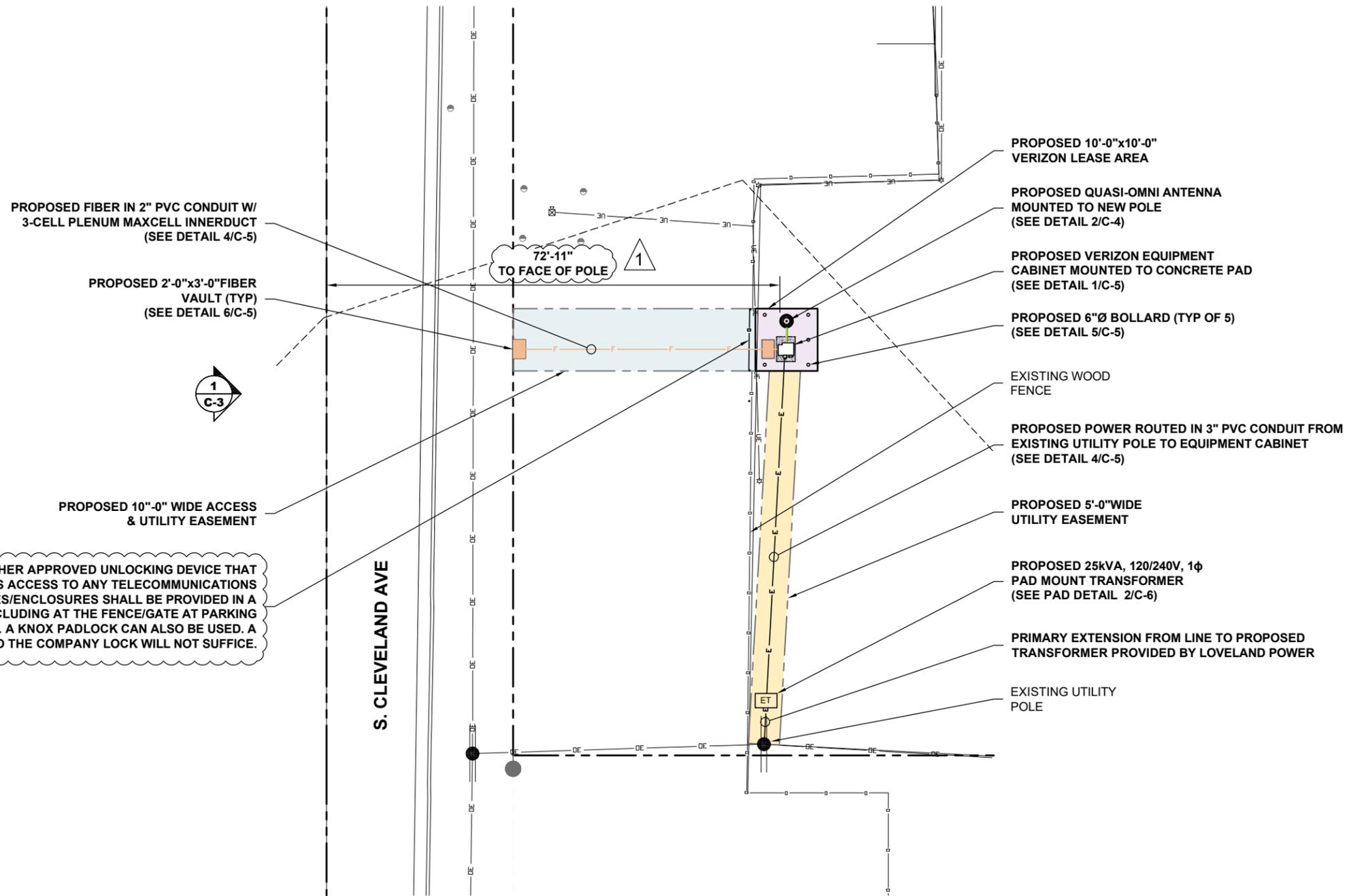
SITE INFORMATION:

SITE NAME:
FTC SOUTH LOVELAND SC

SITE ADDRESS:
**314 S CLEVELAND AVE
 LOVELAND, CO 80537**

JURISDICTION:
CITY OF LOVELAND

JOSHUA D. ROZINA, P.E.
 COLORADO PROFESSIONAL ENGINEER
 LICENSE #53217 (EXP. 10/31/2019)



A KEY OR OTHER APPROVED UNLOCKING DEVICE THAT PROVIDES ACCESS TO ANY TELECOMMUNICATIONS STRUCTURES/ENCLOSURES SHALL BE PROVIDED IN A KNOX BOX, INCLUDING AT THE FENCE/GATE AT PARKING LOT AREA. A KNOX PADLOCK CAN ALSO BE USED. A CODE TO THE COMPANY LOCK WILL NOT SUFFICE.

1 ENLARGED SITE PLAN
Z-2 SCALE: 1"=20'-0"

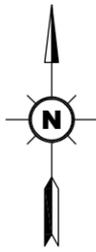


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DRAWING TITLE:

EQUIPMENT PLAN

DRAWING SHEET:

C-1

SHEET NUMBER:

5 OF 14

SITE INFORMATION:

SITE NAME:
FTC SOUTH LOVELAND SC

SITE ADDRESS:
314 S CLEVELAND AVE
LOVELAND, CO 80537

JURISDICTION:
CITY OF LOVELAND

JOSHUA D. ROZINA, P.E.
COLORADO PROFESSIONAL ENGINEER
LICENSE #53217 (EXP. 10/31/2019)

PROPOSED SLIDING WOODEN GATE INSTALLED ON EXISTING WOODEN FENCE (GATE DESIGN TO MATCH EXISTING FENCE STYLE) (SEE SHEET C-6 FOR MORE DETAIL)

PROPOSED 2'-0"x3'-0" FIBER VAULT (SEE DETAIL 6/C-5)

PROPOSED FIBER IN 2" PVC CONDUIT W/ 3-CELL PLENUM MAXCELL INNERDUCT (SEE DETAIL 4/C-5)

A KEY OR OTHER APPROVED UNLOCKING DEVICE THAT PROVIDES ACCESS TO ANY TELECOMMUNICATIONS STRUCTURES/ENCLOSURES SHALL BE PROVIDED IN A KNOX BOX, INCLUDING AT THE FENCE/GATE AT PARKING LOT AREA. A KNOX PADLOCK CAN ALSO BE USED. A CODE TO THE COMPANY LOCK WILL NOT SUFFICE.

PROPOSED 10'-0" WIDE UTILITY EASEMENT

EXISTING WOOD FENCE

EXISTING ASPHALT

PROPOSED 10'-0"x10'-0" VERIZON LEASE AREA

PROPOSED RADIOS INCORPORATED INTO POLE

PROPOSED QUASI OMNI ANTENNA MOUNTED TO NEW POLE

REMOVE EXISTING 20'-0" FLAG POLE AND REPLACE WITH NEW POLE

PROPOSED U/G FIBER AND DC JUMPERS

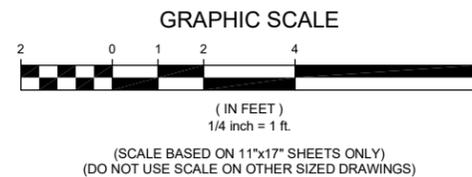
PROPOSED VERIZON EQUIPMENT CABINET MOUNTED TO CONCRETE PAD (SEE DETAIL 1/C-5)

PROPOSED ELECTRICAL METER AND POWER PANEL MOUNTED TO EQUIPMENT CABINET

PROPOSED 6"Ø BOLLARD (TYP OF 5) (SEE DETAIL 5/C-5)

PROPOSED POWER ROUTED IN 3" PVC CONDUIT FROM PROPOSED PAD MOUNT TRANSFORMER TO EQUIPMENT CABINET (SEE SHEET E-1 FOR MORE DETAIL)

1
C-1 **EQUIPMENT PLAN**
SCALE: 1/4"=1'-0"



CABLE TABLE					
SECTOR	AZIMUTH	LENGTH	NO.	SIZE	TYPE
A	N/A	40'	4	1/2"	COAX

NOTES:

- LENGTHS ARE ESTIMATES; CONTRACTOR AND/OR CONSTRUCTION MANAGER SHALL FIELD VERIFY ALL LENGTHS PRIOR TO ORDERING.
- ALL AZIMUTHS SHOWN ARE RELATIVE TO TRUE NORTH, UNLESS NOTED OTHERWISE.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY AZIMUTHS DEPICTED HEREIN WITH THE RF DEPARTMENT PRIOR TO INSTALLING ANY ANTENNAS.



**Know what's below.
Call before you dig.**

PROTECT YOURSELF. GIVE THREE WORKING DAYS NOTICE. THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTINANT.

AERO PROJECT #: 097-16-0165

REVISION SCHEDULE			
REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:
EXISTING ELEVATION

DRAWING SHEET:
C-2

SHEET NUMBER:
6 OF 14

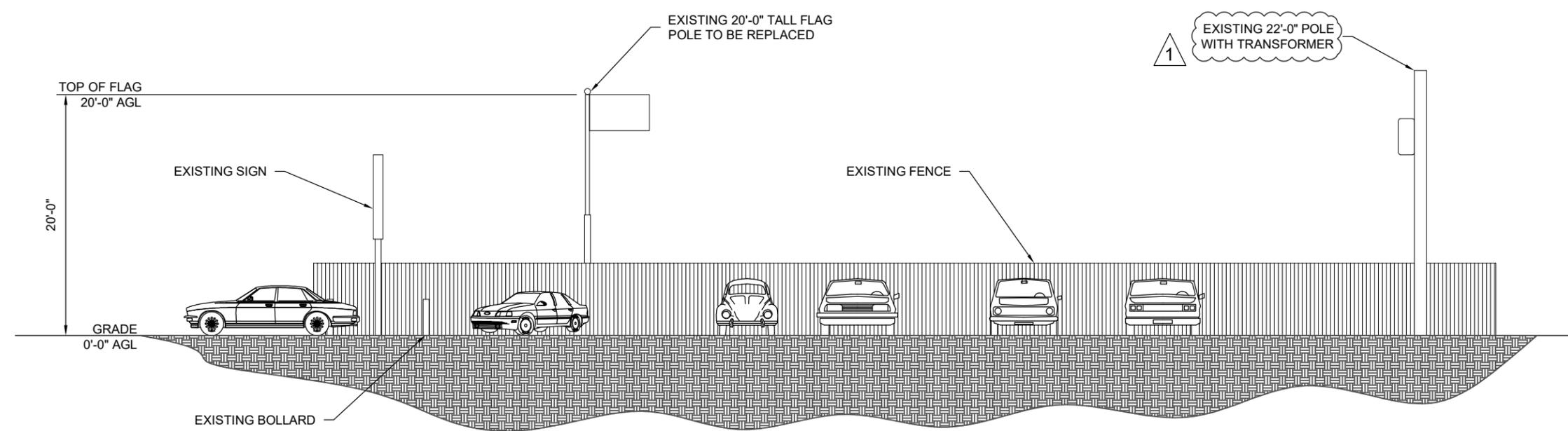
SITE INFORMATION:

SITE NAME:
FTC SOUTH LOVELAND SC

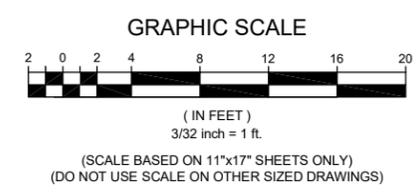
SITE ADDRESS:
**314 S CLEVELAND AVE
LOVELAND, CO 80537**

JURISDICTION:
CITY OF LOVELAND

JOSHUA D. ROZINA, P.E.
COLORADO PROFESSIONAL ENGINEER
LICENSE #53217 (EXP. 10/31/2019)



1
C-2 **EXISTING EAST ELEVATION**
SCALE: 3/32"=1'-0"



AERO PROJECT #: 097-16-0165

REVISION SCHEDULE			
REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:
PROPOSED ELEVATION

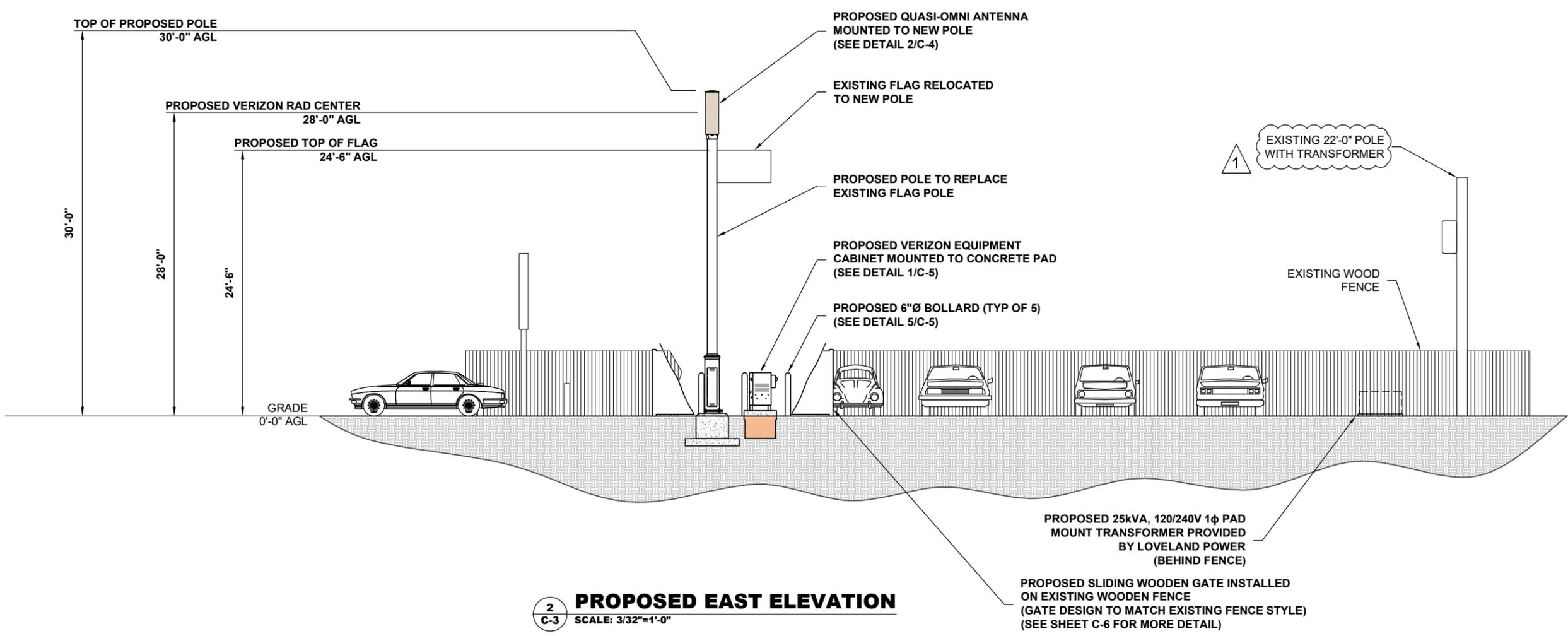
DRAWING SHEET:
C-3

SHEET NUMBER:
 7 OF 14

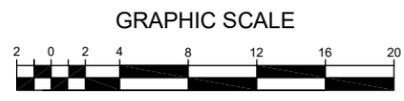
SITE INFORMATION:
 SITE NAME:
FTC SOUTH LOVELAND SC

SITE ADDRESS:
**314 S CLEVELAND AVE
 LOVELAND, CO 80537**

JURISDICTION:
CITY OF LOVELAND



2
C-3
PROPOSED EAST ELEVATION
 SCALE: 3/32"=1'-0"



(SCALE BASED ON 11"x17" SHEETS ONLY)
 (DO NOT USE SCALE ON OTHER SIZED DRAWINGS)

AERO PROJECT #: 097-16-0165

REVISION SCHEDULE			
REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:
CONSTRUCTION DETAILS

DRAWING SHEET:
C-4

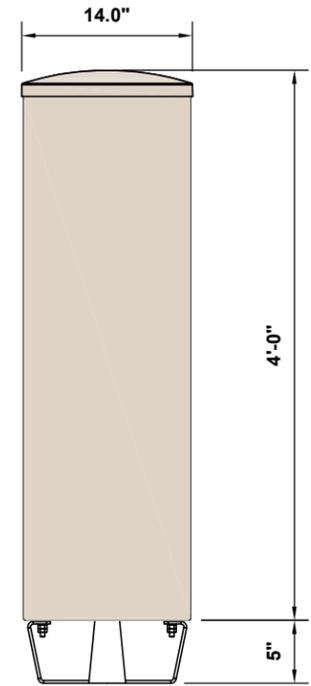
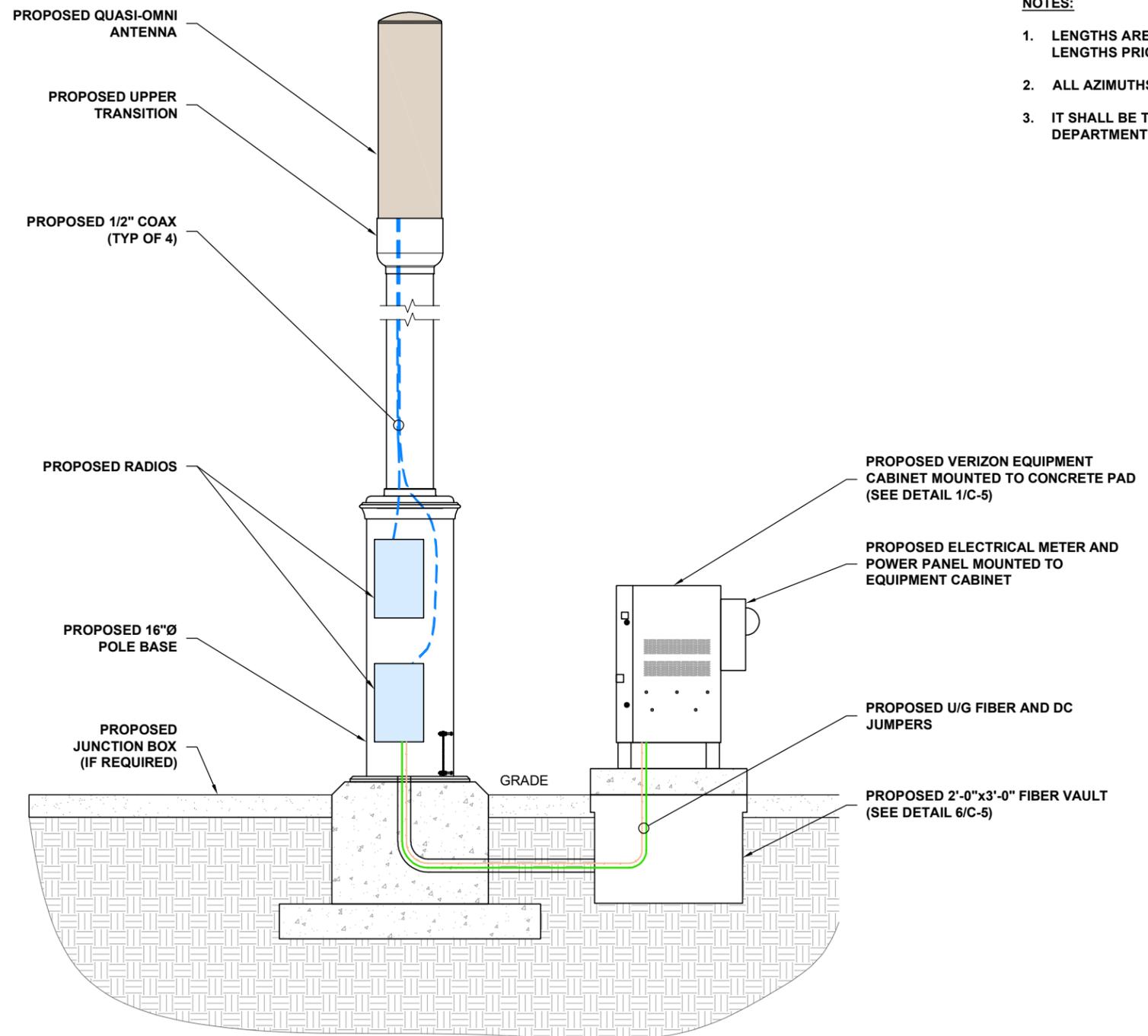
SHEET NUMBER:
 8 OF 14

SITE INFORMATION:
 SITE NAME:
FTC SOUTH LOVELAND SC
 SITE ADDRESS:
**314 S CLEVELAND AVE
 LOVELAND, CO 80537**
 JURISDICTION:
CITY OF LOVELAND

ANTENNA & CABLE SCHEDULE					
AZIMUTH	MOUNTING HEIGHT	ANTENNA SPECIFICATIONS	ELECTRICAL DOWNTILT	CABLE SIZE	CABLE LENGTH
N/A	28'-0"	48.0"(L) X 14.0"(D) (4.27 FT ²) 50 LBS	N/A	(4) 1/2" COAX	40 FT.

NOTES:

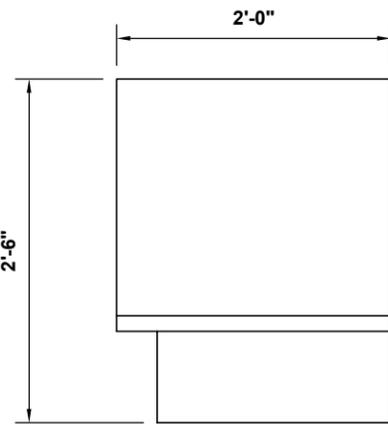
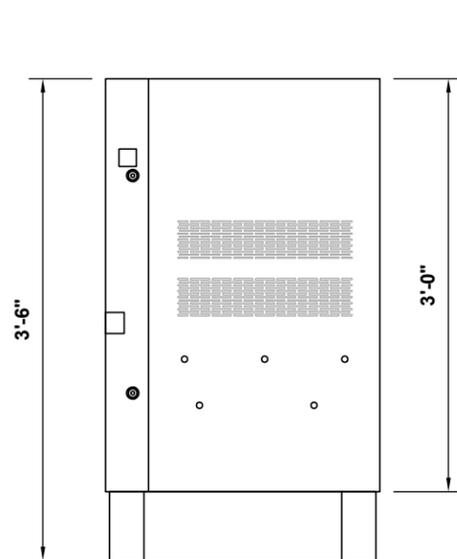
- LENGTHS ARE ESTIMATES; CONTRACTOR AND/OR CONSTRUCTION MANAGER SHALL FIELD VERIFY ALL LENGTHS PRIOR TO ORDERING.
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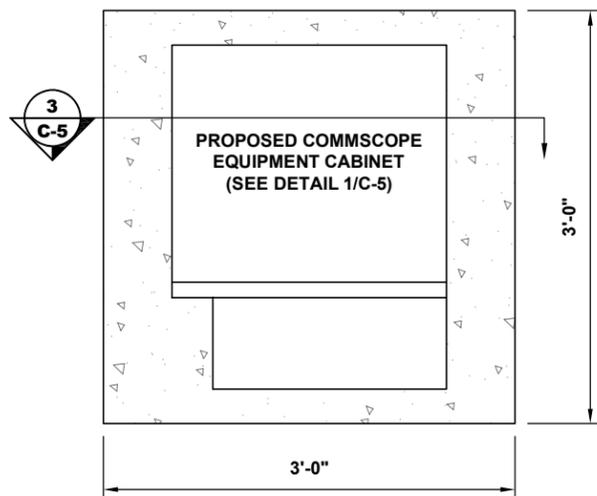
2
C-4 PROPOSED ANTENNA DETAIL
 N.T.S.

1
C-4 PROPOSED POLE ELEVATION
 N.T.S.

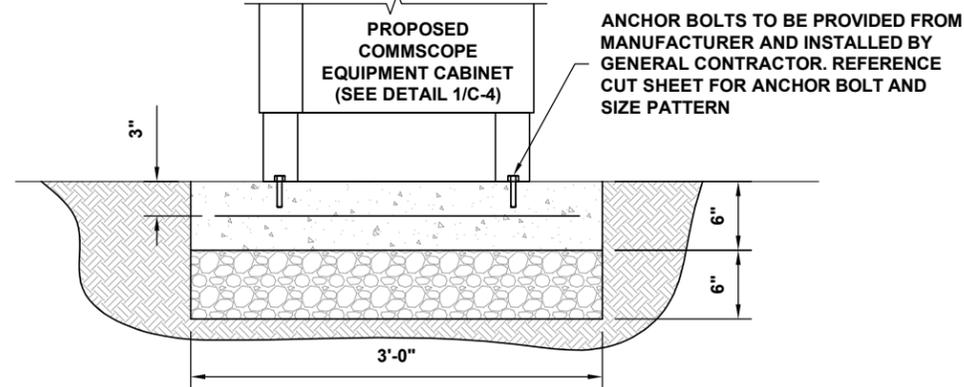
811
 Know what's below.
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 PROTECT YOURSELF. GIVE THREE WORKING DAYS NOTICE.
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COMMSCOPE RBC36 SMALL CELL CABINET
MODEL: 760209700
CABINET WEIGHT: 200LBS. (AS SHIPPED)

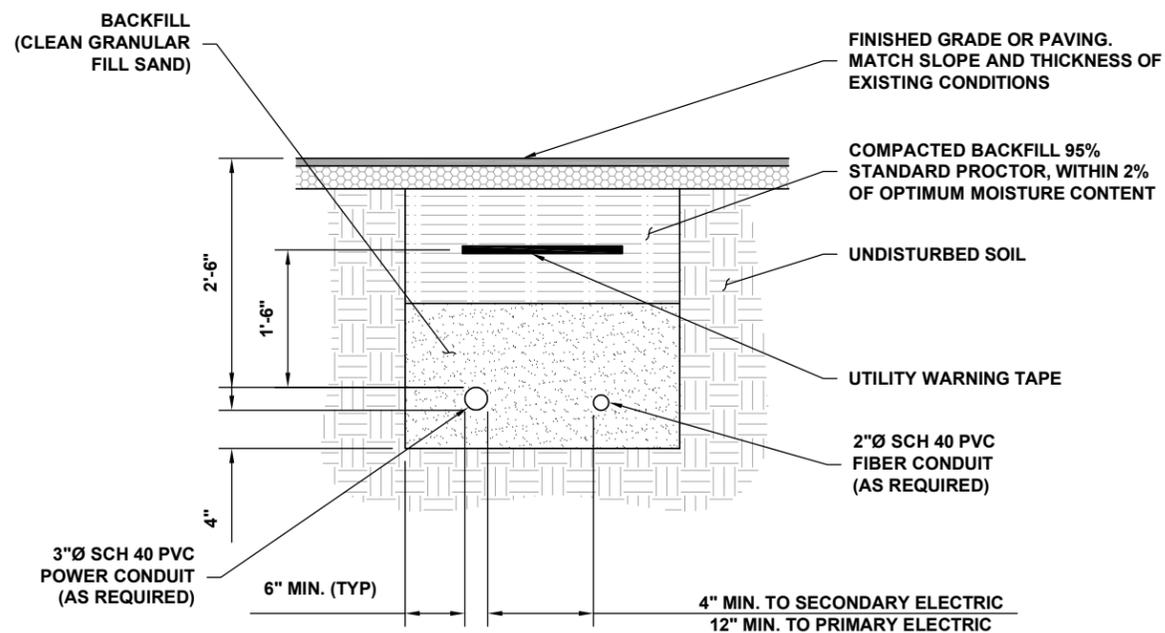


2 CONCRETE PAD DETAIL
2 C-5 N.T.S.



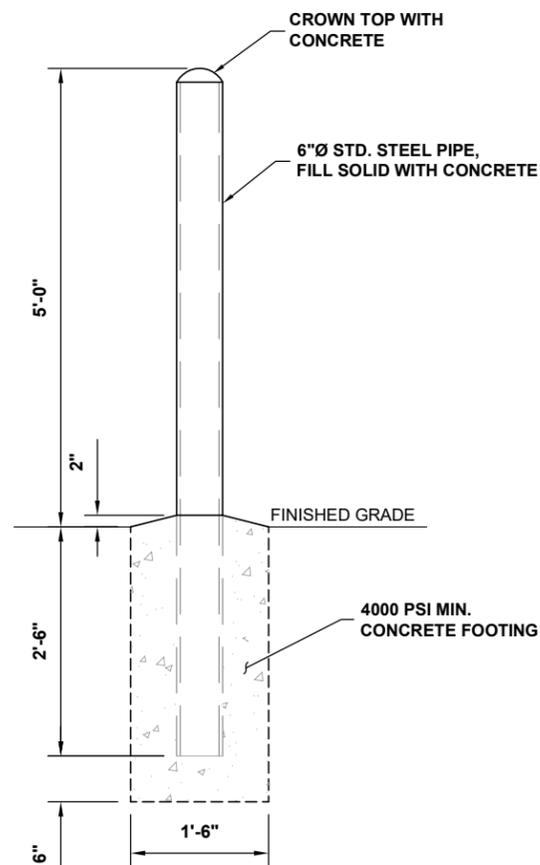
3 CONCRETE PAD SECTION
3 C-5 N.T.S.

1 EQUIPMENT CABINET DETAIL
1 C-5 N.T.S.

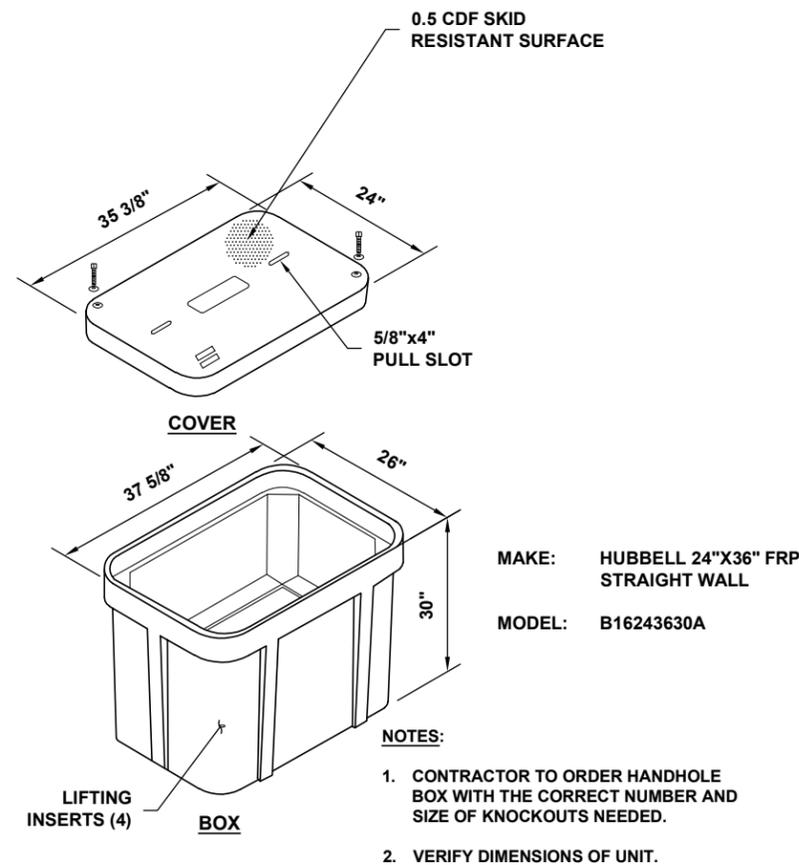


NOTE:
 SEPARATION DIMENSIONS TO BE VERIFIED WITH
 LOCAL UTILITY COMPANY REQUIREMENTS.

4 UTILITY TRENCH DETAIL
4 C-5 N.T.S.



5 BOLLARD DETAIL
5 C-5 N.T.S.



NOTES:
 1. CONTRACTOR TO ORDER HANDHOLE BOX WITH THE CORRECT NUMBER AND SIZE OF KNOCKOUTS NEEDED.
 2. VERIFY DIMENSIONS OF UNIT.

6 PULLBOX DETAIL
6 C-5 N.T.S.

AERO PROJECT #: 097-16-0165

REVISION SCHEDULE

REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:

**CONSTRUCTION DETAILS
 (CONTINUED)**

DRAWING SHEET:

C-5

SHEET NUMBER:

9 OF 14

SITE INFORMATION:

SITE NAME:
FTC SOUTH LOVELAND SC

SITE ADDRESS:
**314 S CLEVELAND AVE
 LOVELAND, CO 80537**

JURISDICTION:
CITY OF LOVELAND



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AERO PROJECT #: 097-16-0165

REVISION SCHEDULE

REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:
CONSTRUCTION DETAILS (CONTINUED)

DRAWING SHEET:
C-6

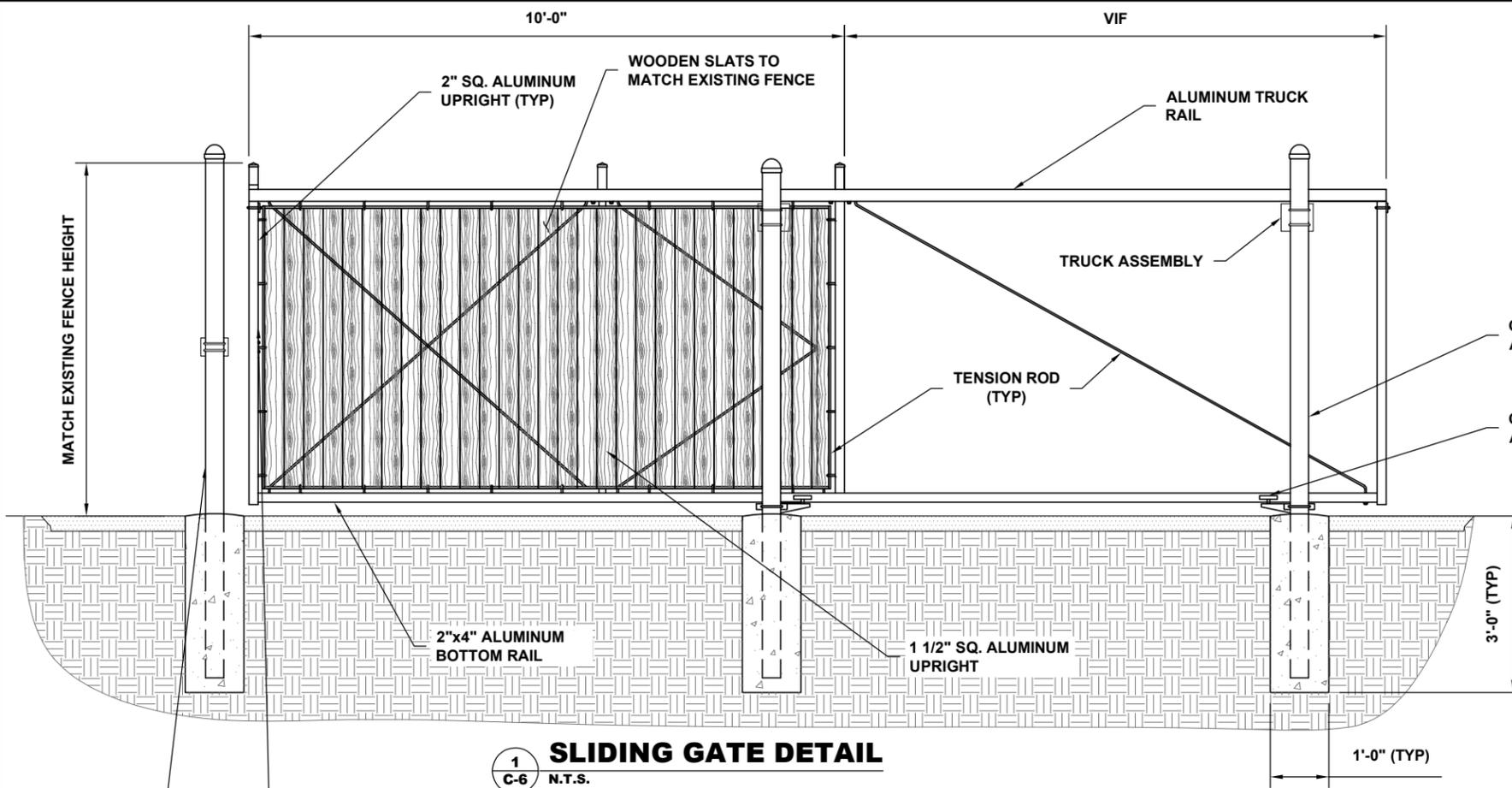
SHEET NUMBER:
 10 OF 14

SITE INFORMATION:
 SITE NAME:
FTC SOUTH LOVELAND SC

SITE ADDRESS:
 314 S CLEVELAND AVE
 LOVELAND, CO 80537

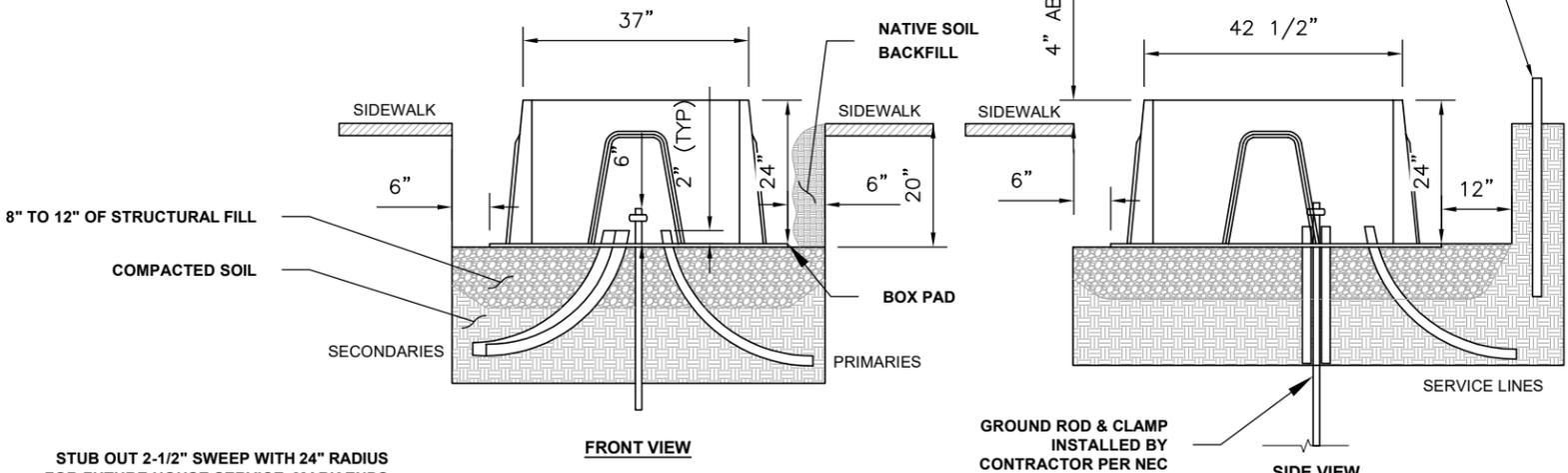
JURISDICTION:
 CITY OF LOVELAND

JOSHUA D. ROZINA, P.E.
 COLORADO PROFESSIONAL ENGINEER
 LICENSE #53217 (EXP. 10/31/2019)



1 SLIDING GATE DETAIL
 C-6 N.T.S.

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STUB OUT 2-1/2\"/>

ALL SECONDARY CIC CABLES MUST BE ON LEFT SIDE OF TRANSFORMER AS YOU FACE TRANSFORMER. PROVIDE MIN 5' CABLE LENGTH ABOVE PAD FOR TERMINATING WHEN USING CIC

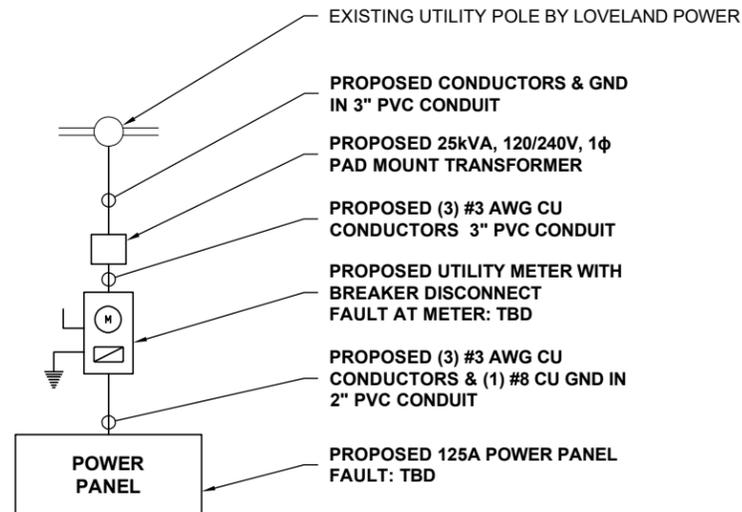
ALL PRIMARY CIC CABLES MUST BE ON RIGHT SIDE OF TRANSFORMER AS YOU FACE TRANSFORMER. PROVIDE MIN 5' CABLE LENGTH ABOVE PAD FOR TERMINATING WHEN USING CIC

2 TRANSFORMER DETAIL (SINGLE PHASE)
 C-6 N.T.S.

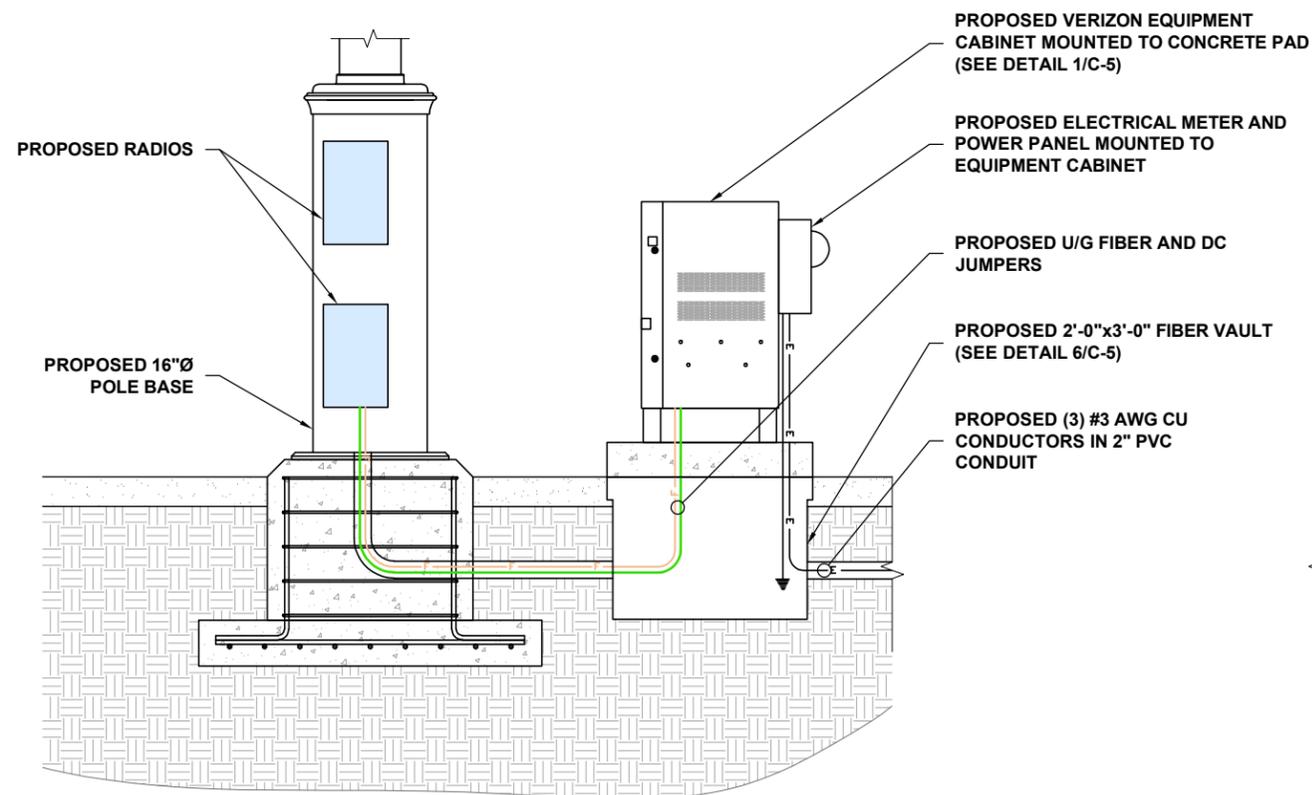
3\"/>

811
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1 ONE-LINE DIAGRAM
E-1 N.T.S.

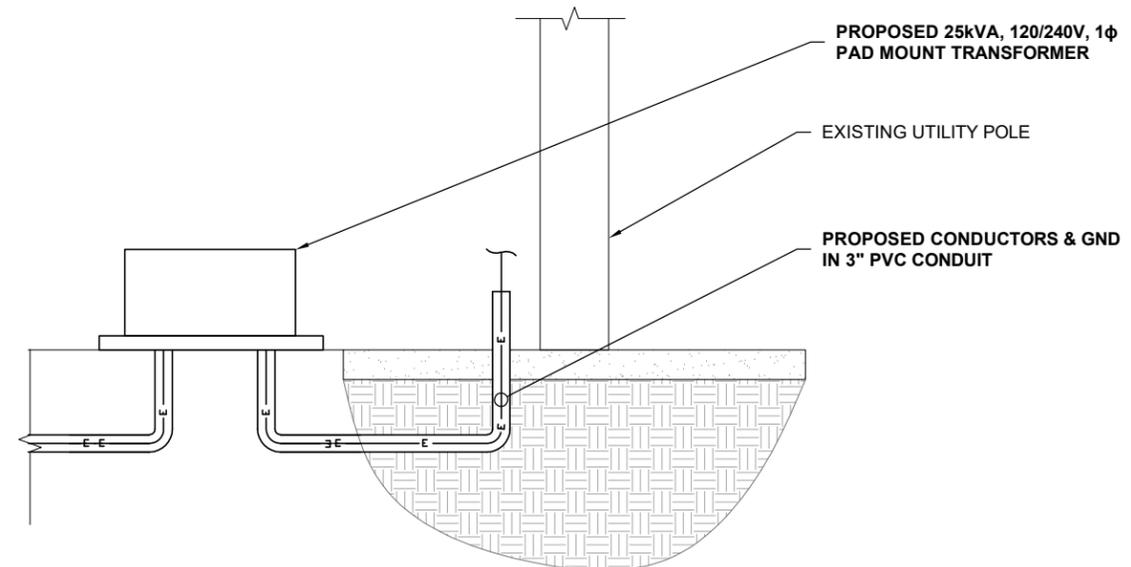


2 ONE-LINE ELEVATION
E-1 N.T.S.

100A, 120/240V, 1Ø, 3W PROPOSED SUB-PANEL SCHEDULE										
LOAD SERVED	VOLT AMPERES (WATTS)		TRIP	CKT #	PHASE	CKT #	TRIP	VOLT AMPERES (WATTS)		LOAD SERVED
	L1	L2						L1	L2	
RECTIFIER #1	500		25A	1	A	2	25A	500		RECTIFIER #2
		500		3	B	4			500	
SPARE	-		-	5	A	6		500		RECTIFIER #3
GFCI		180	20A	7	B	8	25A		500	
VOLT AMPS	500	680						1000	1000	VOLT AMPS
L1 VOLT AMPERES				1500	L2 VOLT AMPERES					
L1 AMPS				12.5	L2 AMPS					
				14	MAX AMPS					
				17.5	MAX AMPS x125%					
				19.25	X 110% FOR MAIN					

NOTES:

- TOTAL VERIZON LOAD TO BE APPROX 19.25A.
- FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT, REFER TO VENDOR PRINTS PROVIDED BY EQUIPMENT CABINET MANUFACTURER..
- CONTRACTOR TO INSTALL SCH80 PVC FOR ALL CONDUIT SWEEPS, OTHERWISE SCH40 PVC IS ACCEPTABLE EXCEPT WHERE NOTED.



AERO PROJECT #: 097-16-0165

REVISION SCHEDULE

REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:

ONE LINE DIAGRAM & PANEL SCHEDULE

DRAWING SHEET:

E-1

SHEET NUMBER:

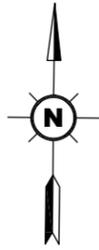
11 OF 14

SITE INFORMATION:

SITE NAME:
FTC SOUTH LOVELAND SC

SITE ADDRESS:
314 S CLEVELAND AVE
LOVELAND, CO 80537

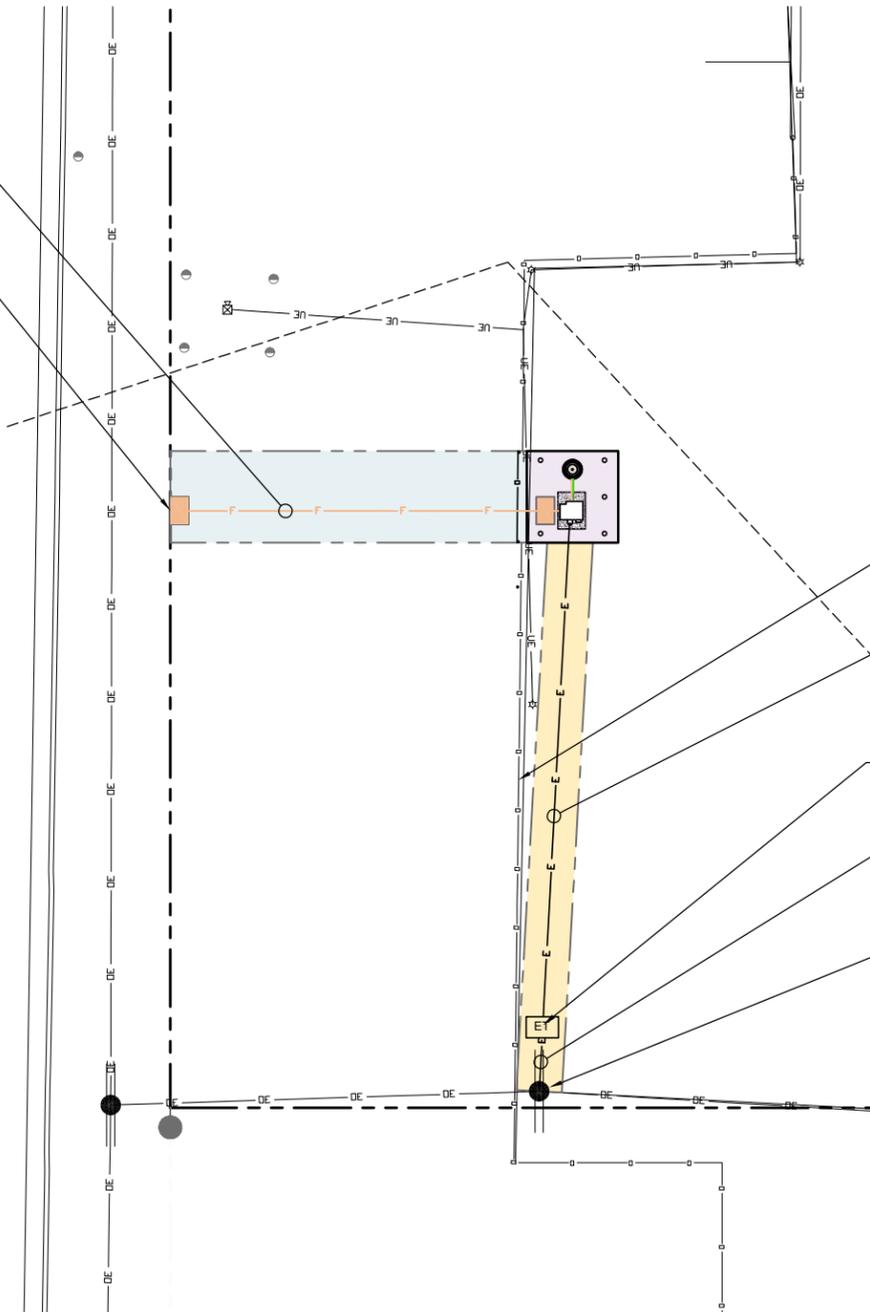
JURISDICTION:
CITY OF LOVELAND



PROPOSED FIBER IN 2" PVC CONDUIT W/
3-CELL PLENUM MAXCELL INNERDUCT
(SEE DETAIL 1/C-5)

PROPOSED 2'-0"x3'-0" FIBER
VAULT (TYP)
(SEE DETAIL 2/C-5)

S. CLEVELAND AVE



UTILITY PLAN SCHEDULE					
QUANTITY	ITEM	DESCRIPTION	LENGTH	PROVIDED BY	INSTALLED BY
1	TRANSFORMER	PROPOSED 120/240V, 1Ø, 3W, 25kVA	-	LOVELAND POWER	LOVELAND POWER
1	TRANSFORMER PAD	37" x 42 1/2"	-	CONTRACTOR	CONTRACTOR
1	CONDUITS - LINE TO METER	2" PVC	65±	CONTRACTOR	CONTRACTOR
3	CONDUCTORS - LINE TO METER	(3) TBD AWG AWG CU CONDUCTORS	65±	CONTRACTOR	CONTRACTOR
1	DISCONNECT	LEVER-TYPE 100A FUSED	-	CONTRACTOR	CONTRACTOR
1	METER SOCKET	TYP	-	CONTRACTOR	CONTRACTOR
1	METER	TYP	-	LOVELAND POWER	LOVELAND POWER

POWER NOTES:

- SERVICE SHALL BE 120/208V, 1Ø, 3W, 100A
- CONTRACTOR TO COORDINATE INSPECTION AND PLACEMENT OF METER WITH THE LOCAL UTILITY COMPANY:
FTC L&P
CONTACT: TBD
PHONE: TBD
W.O. NUMBER: TBD

EXISTING WOOD
FENCE

PROPOSED POWER ROUTED IN 3" PVC CONDUIT FROM
PROPOSED TRANSFORMER TO EQUIPMENT CABINET
(SEE DETAIL 4/C-5)

PROPOSED 25kVA, 120/240V, 1φ PAD MOUNT
TRANSFORMER (SEE DETAIL 2/C-6)

PRIMARY EXTENSION FROM LINE TO PROPOSED
TRANSFORMER PROVIDED BY LOVELAND POWER

EXISTING UTILITY
POLE

1
U-1
UTILITY PLAN
SCALE: 1"=20'-0"



(IN FEET)
1 inch = 20 ft.
(SCALE BASED ON 11"x17" SHEETS ONLY)
(DO NOT USE SCALE ON OTHER SIZED DRAWINGS)

verizon
3131 SOUTH VAUGHN WAY #500
AURORA, COLORADO 80014
(303) 873-2652

AeroSolutions LLC
Optimizing Your Wireless Infrastructure
5555 CENTRAL AVENUE #100
BOULDER, COLORADO 80301
PH: (720) 304-6882
FAX: (720) 304-6883

AERO PROJECT #: 097-16-0165

REVISION SCHEDULE

REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:

UTILITY
COORDINATION

DRAWING SHEET:

U-1

SHEET NUMBER:

12 OF 14

SITE INFORMATION:

SITE NAME:
FTC SOUTH LOVELAND SC

SITE ADDRESS:
314 S CLEVELAND AVE
LOVELAND, CO 80537

JURISDICTION:
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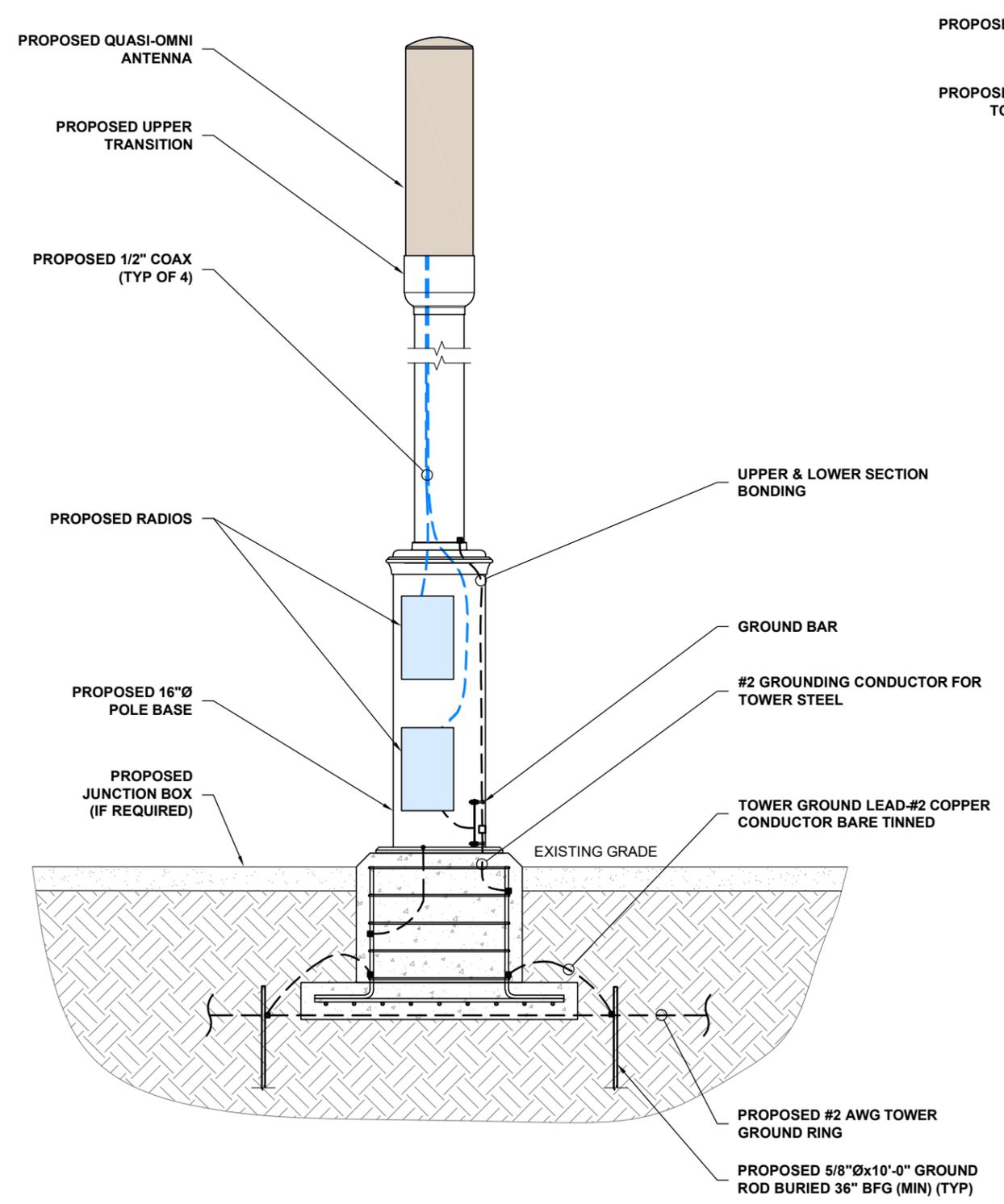
REVISION SCHEDULE			
REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
0	06-15-18	RPH	PRELIM CDs

DRAWING TITLE:
GROUNDING PLAN

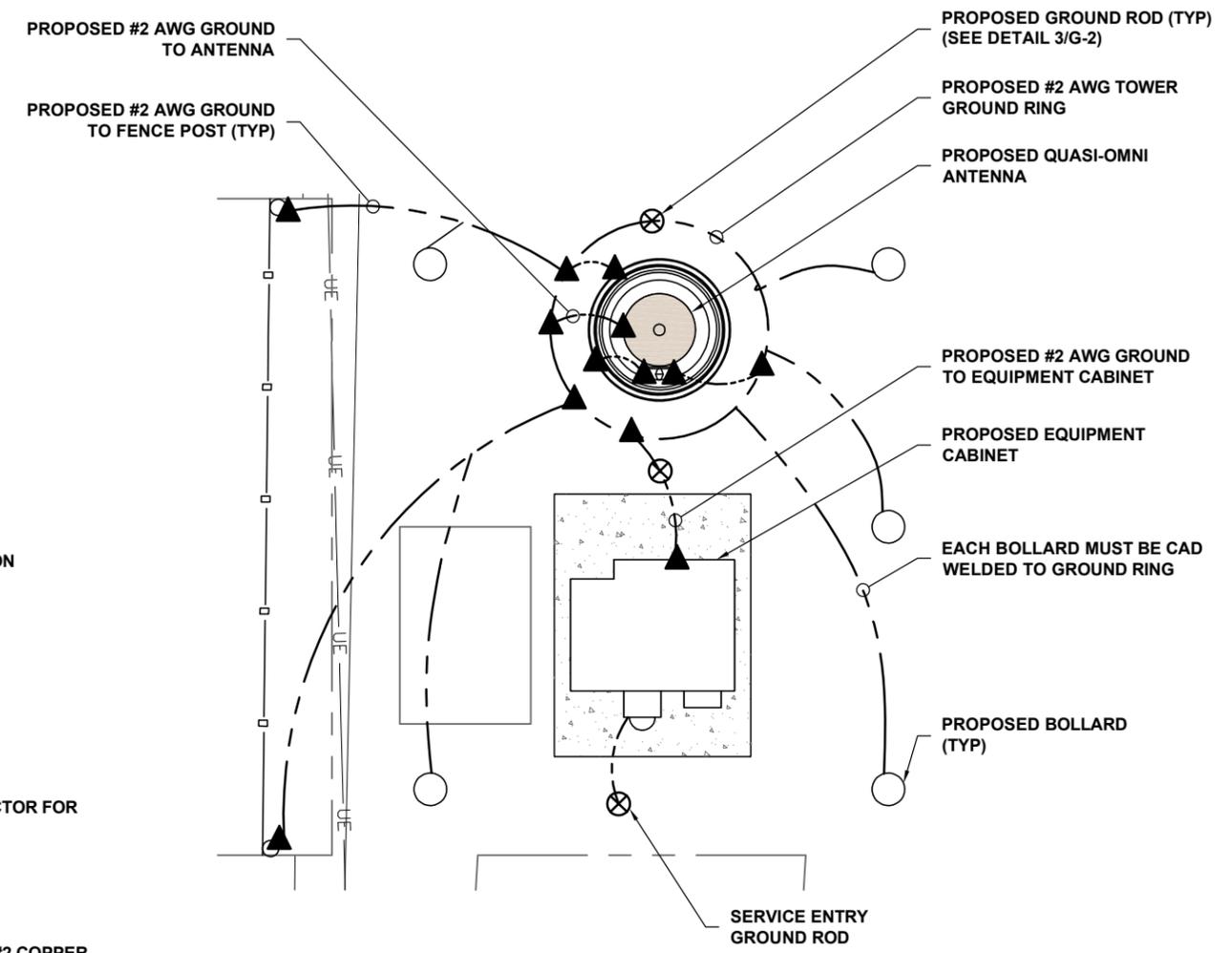
DRAWING SHEET:
G-1

SHEET NUMBER:
 13 OF 14

SITE INFORMATION:
 SITE NAME:
FTC SOUTH LOVELAND SC
 SITE ADDRESS:
**314 S CLEVELAND AVE
 LOVELAND, CO 80537**
 JURISDICTION:
CITY OF LOVELAND



1
G-1
GROUNDING ELEVATION
 N.T.S.



2
G-1
PROPOSED GROUNDING PLAN
 N.T.S.

GROUND SYMBOLS:

- ⊗ GROUND ROD W/ ACCESS
- ⊕ XIT GROUND ROD
- ⊗ 5/8" GALVANIZED GROUND ROD
- MECHANICAL TYPE CONNECTION
- ▲ CADWELD TYPE CONNECTION
- — GROUNDING WIRE



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REVISION SCHEDULE			
REV	DATE	BY	DESCRIPTION
1	11-09-18	GAC	REVISED PRELIM CDs
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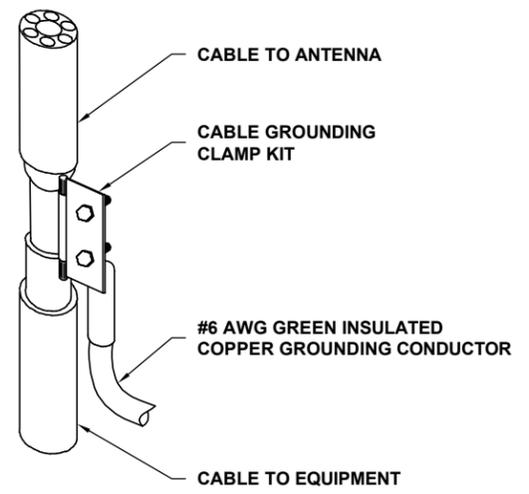
DRAWING TITLE:
GROUNDING DETAILS

DRAWING SHEET:
G-2

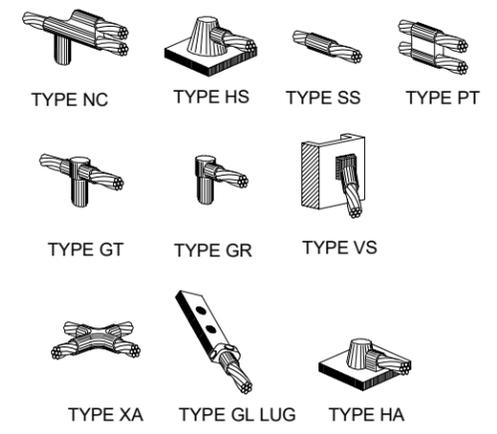
SHEET NUMBER:
 14 OF 14

SITE INFORMATION:
 SITE NAME:
FTC SOUTH LOVELAND SC
 SITE ADDRESS:
**314 S CLEVELAND AVE
 LOVELAND, CO 80537**
 JURISDICTION:
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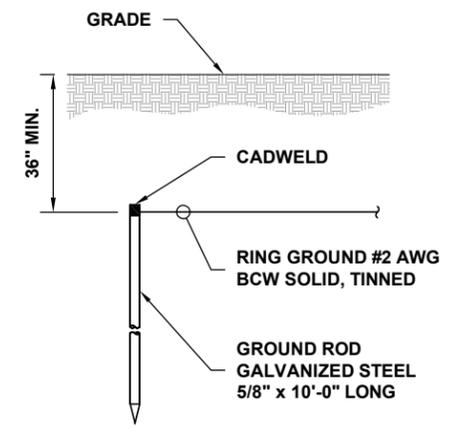
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 LICENSE #53217 (EXP. 10/31/2019)



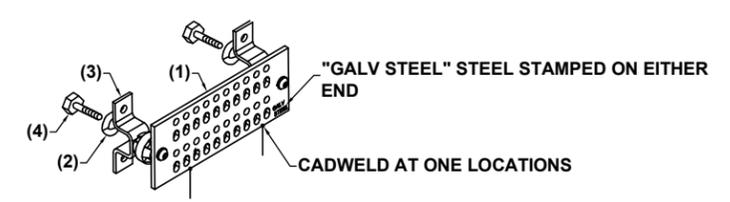
1
G-2 **TYPICAL CABLE GROUNDING**
 N.T.S.



2
G-2 **CADWELD TYPE CONNECTIONS**
 N.T.S.



3
G-2 **GROUND ROD DETAIL**
 N.T.S.



- LEGEND**
- (1) GALVANIZED STEEL GROUND BAR, BY ELECTRIC MOTION COMPANY (SEE SCHEDULE BELOW).
 - (2) 5/8" LOCKWASHERS, STAINLESS STEEL.
 - (3) WALL MOUNTING BRACKET, HARGER CAT. #WBKT-2.
 - (4) 5/8" THREADED STUD WELDED DIRECTLY TO TOWER STEEL.

GROUND BAR SCHEDULE		
MANUFACTURER	CAT. NO.	REMARKS
ELECTRIC MOTION COMPANY	EM SGC412-VZW	OR EQUAL
ELECTRIC MOTION COMPANY	EM SGC424-VZW	OR EQUAL

4
G-2 **GROUND BAR DETAIL**
 N.T.S.