

COUNCIL ACTION FORM

SUBJECT: AMENDMENT OF CELLULAR SITE LEASE WITH IOWA WIRELESS SERVICES

BACKGROUND

On January 28, 2014, Council approved the transfer of an existing lease for cellular equipment to Iowa Wireless Services (iWireless). The lease space is for cellular antennas on top of the Bloomington Road Elevated Tower (BRET). A request has now been received from iWireless to upgrade its equipment which is allowed by the terms of their lease.

The plans have been reviewed by staff and the equipment replacement will not cause any disruption to the water tower or water service. There is no net increase in space required by the new equipment and no net increase in the number of antennas. As such, staff does not believe it is appropriate to attempt to negotiate new monthly rental rates.

Approved construction drawings are incorporated into the lease documents. The attached signed drawings dated July 15, 2016 should become the new Exhibit C in the current lease documents, thus allowing the lease to reflect the current installation.

ALTERNATIVES:

1. Approve the lease modification with iWireless for the Bloomington Road Elevated Tower, incorporating the equipment upgrade drawings as the revised Exhibit C.
2. Do not approve the lease modification at this time.

MANAGER'S RECOMMENDED ACTION:

The attached lease provisions allow for needed equipment upgrades, and the request for upgrades was made in a timely fashion. Staff has reviewed the drawings and the modifications should not present issues with operation of the water tower.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.

AMES WT SITE NO - DMO1170

178' EXISTING WATER TOWER
182' RAD CENTER
2521 BLOOMINGTON RD.
AMES, IA 50010

FINAL
7/15/2016

PROJECT SUMMARY

SITE NAME: AMES WT
 SITE ADDRESS: 2521 BLOOMINGTON RD.
 AMES, IA 50010
 TOWER TYPE: 178' EXISTING WATER TOWER
 JURISDICTION: AMES (STORY COUNTY)
 PROPERTY CONTACT: CITY OF AMES
 ATTN: KRIS EVANS,
 ENVIRONMENTAL ENGINEER
 AMES WATER AND POLLUTION
 CONTROL
 300 EAST 5TH STREET, BLDG. #1
 AMES, IOWA 50010
 PHONE: (515) 239-5150
 E-MAIL: KEVANS@CITY.AMES.IA.US
 APPLICANT: IWIRELESS
 4135 NW URBAN DALE DRIVE
 URBAN DALE, IOWA 50322
 A/E FIRM: XCEL CONSULTANTS INC.
 8300 42ND STREET
 WEST ROCK ISLAND, IL 61201
 BRIAN HOLLAND
 PHONE: 309.787.9988
 GPS COORDINATES: LATITUDE: 42°03'25.13" N
 LONGITUDE: 93°38'35.57" W
 IOWA ONE CALL: 1-800-292-8989

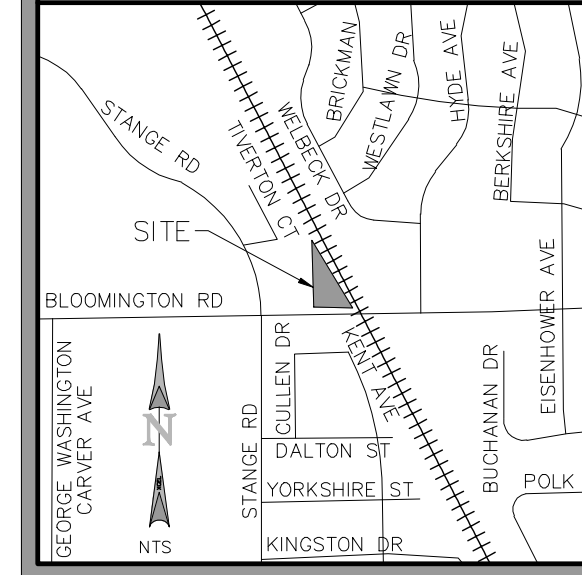
DRIVING DIRECTIONS

FROM I-80, TAKE EXIT #113 - 13TH STREET/USDA VETERINARY LABS. TURN LEFT ONTO 220TH STREET. STAY STRAIGHT ONTO E 13TH STREET. TURN RIGHT ONTO GRAND AVE/US-69 N. TURN LEFT ONTO BLOOMINGTON RD. SITE IS ON THE RIGHT. 43.4 MILES AND 47 MINUTES FROM URBAN DALE OFFICE.

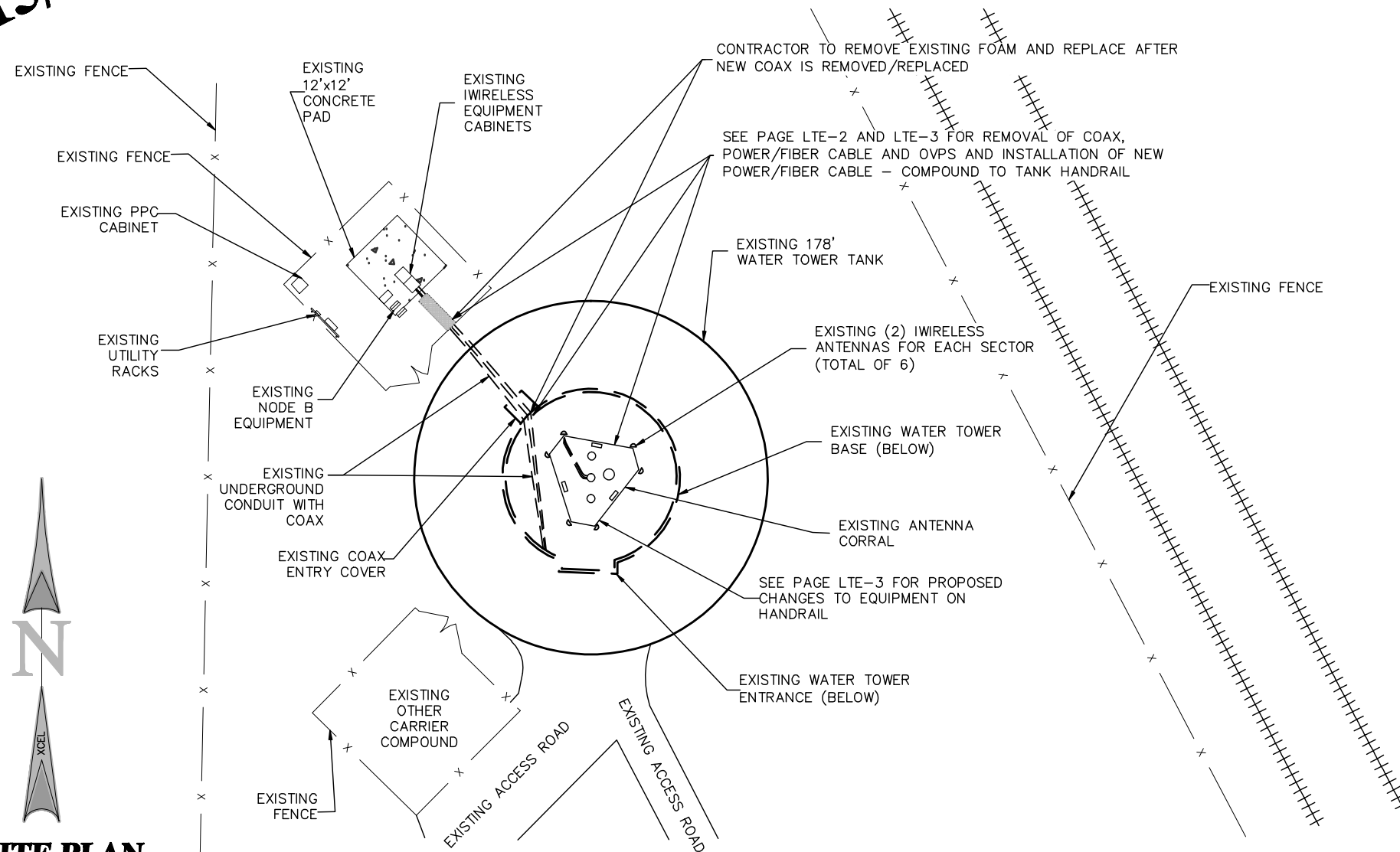
NOTES:

- DESIGN IS BASED UPON AND IN COMPLIANCE WITH THE 2012 INTERNATIONAL BUILDING CODE.

VICINITY MAP



FINAL
7/15/2016



PROFESSIONAL CERTIFICATION



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

Brian Muzingo Ewalt

7/15/2016
DATE:

BRIAN MUZINGO EWALT
 LICENSE NUMBER 19246
 MY LICENSE RENEWAL DATE IS DECEMBER 31, 2016
 PAGES OR SHEETS COVERED BY THIS SEAL:
 LTE-1, LTE-2, LTE-3, LTE-4



8300 42ND STREET WEST
 ROCK ISLAND, IL 61201

(O) 309-787-9988
 (F) 309-756-5540
 (E) XCEL@XCELCONSULTANTSINC.COM
 DESIGN FIRM REGISTRATION NUMBER 184-005864

PROJECT MANAGER



APPLICANT:



DRAWN BY: CHK BY: APV BY:

DRS BCH BME

SITE NAME:

AMES WT

IWIRELESS SITE NUMBER:

DMO1170

REVISIONS:

REV.	DATE	DESCRIPTION
1	06/13/16	IR COMMENTS
2		
3		
4		
5		

DRAWING TITLE:

OVERALL SITE PLAN

DRAWING NUMBER:

LTE-1

JOB NUMBER:

160953

1 SITE PLAN
 SCALE: 1" = 25'

EXISTING IWIRELESS ANTENNAS, TMAS AND RRUS - SEE PAGE LTE-3 FOR PROPOSED CHANGEOUTS

EXISTING (1) IWIRELESS NOKIA FRIA EACH SECTOR (FOR A TOTAL OF 3)

PROPOSED IWIRELESS ANTENNAS 182'-0"

TOP OF TOWER 178'-0"

EXISTING WATER TANK

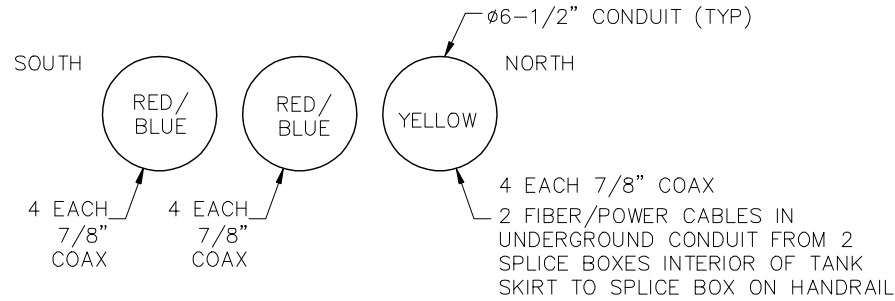
EXISTING CORRAL

TWO (2) HYBRID POWER/FIBER CABLES TO BE REMOVED AND REPLACED WITH ONE (1) HYBRID POWER/FIBER CABLE. SIX (6) 7/8" COAX LINES TO BE REMOVED BUT SPACE RESERVED FOR FUTURE USE. SIX (6) 7/8" COAX LINES TO REMAIN.

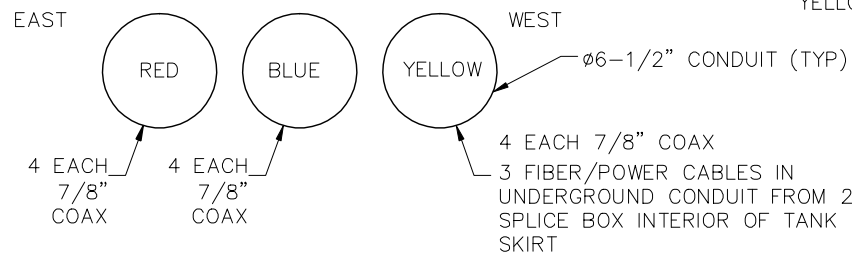
TWO (2) OVP/SPLICE BOXES TO BE REMOVED - NO REPLACEMENT (INTERIOR)

TWO (2) HYBRID POWER/FIBER CABLES TO BE REMOVED AND REPLACED WITH ONE (1) HYBRID POWER/FIBER CABLE. SIX (6) 7/8" COAX LINES TO BE REMOVED BUT SPACE RESERVED FOR FUTURE USE. SIX (6) 7/8" COAX LINES TO REMAIN.

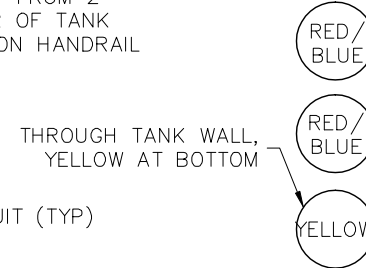
INSIDE TANK BEFORE VERTICAL RUN



IN COMPOUND FACING TANK



PENETRATION AT TANK BASE



2 COAX ROUTING IN CONDUIT (EXISTING)

SCALE: NTS

PROPOSED LTE GPS ANTENNA

EXISTING NODE B

EXISTING EQUIPMENT CABINETS

EXISTING COAX ENTRY COVER

EXISTING COAX

1 ELEVATION

SCALE: NTS



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URBANDALE, IA 50322

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ELEVATION

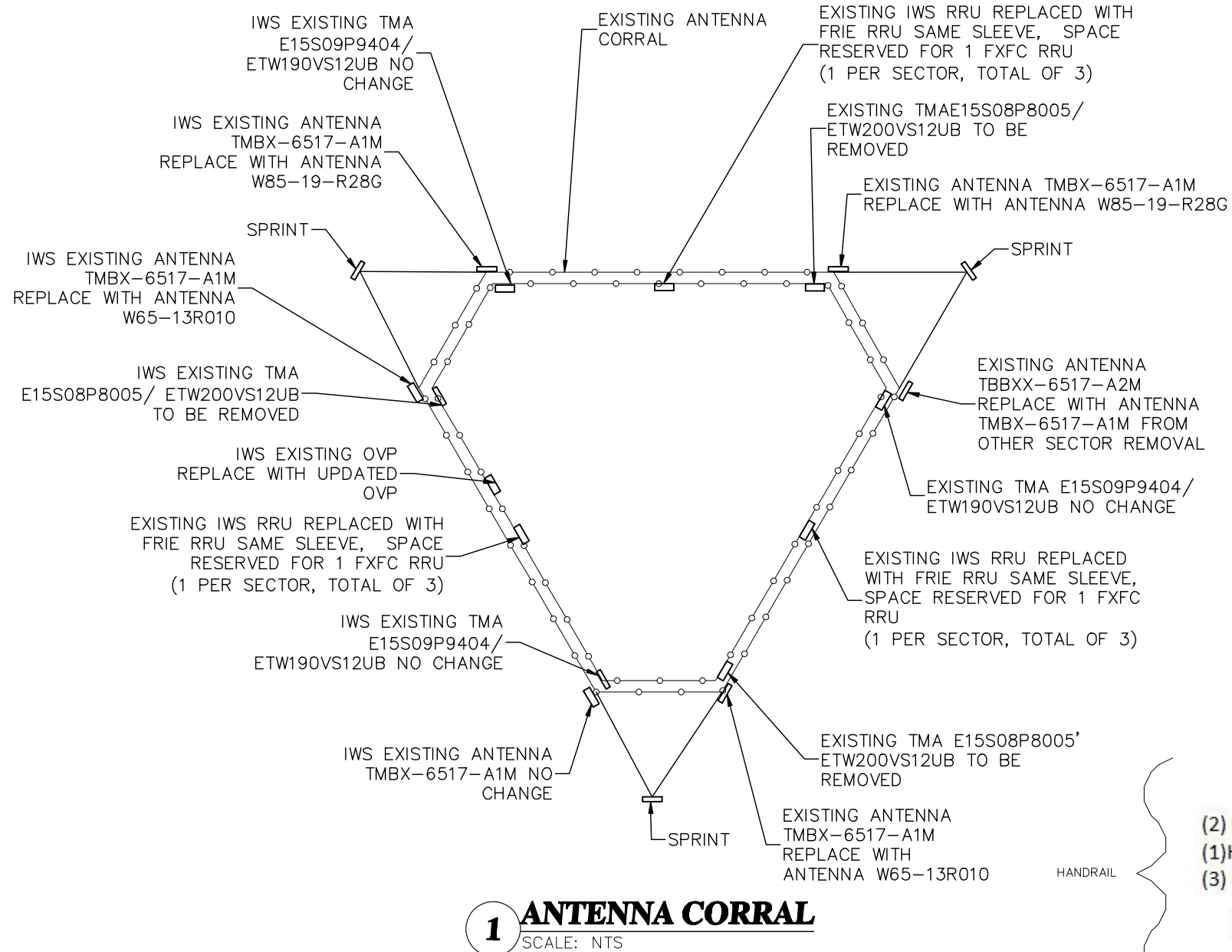
DRAWING NUMBER:

LTE-2

JOB NUMBER:

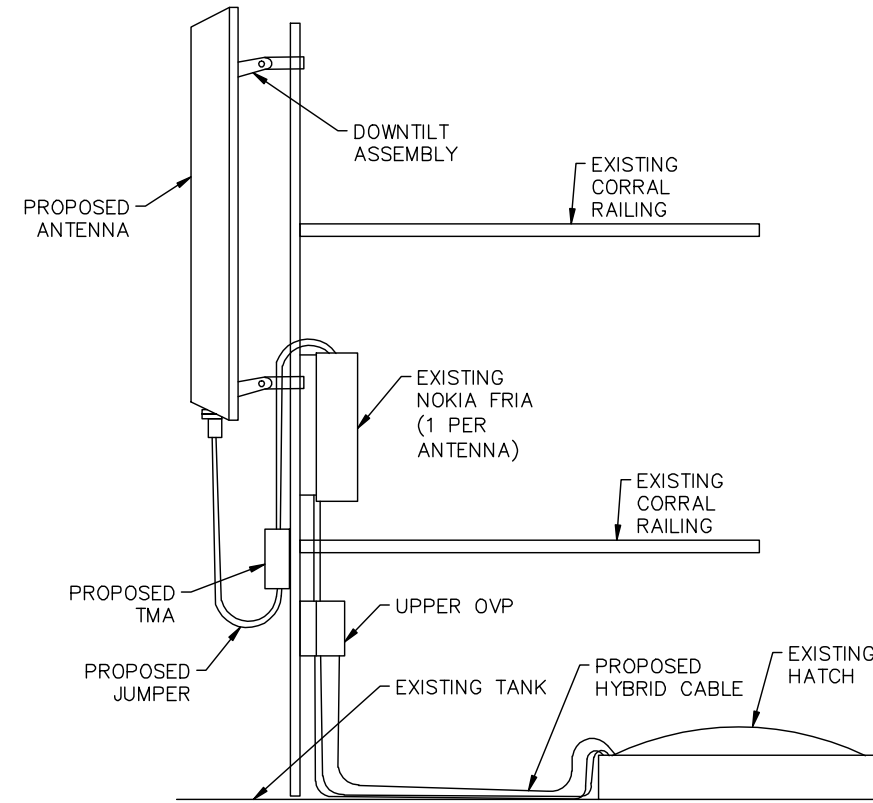
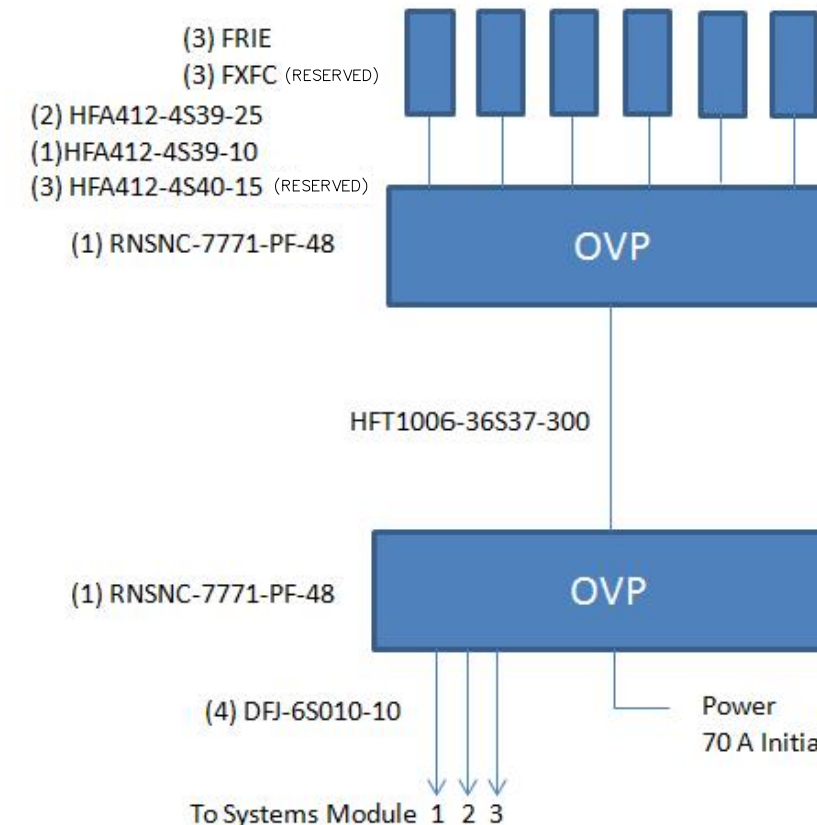
160953

PROPOSED HANDRAIL EQUIPMENT CHANGES



ANTENNA CORRAL LOADING

ITEM	QUANTITY BEFORE	QUANTITY AFTER
TMBX-6517-A1M ANTENNA	5	2
TMBX-6517-A2M ANTENNA	1	0
W65-13R ANTENNA	0	2
W85-19R28 ANTENNA	0	2
TOWER MOUNTED AMPLIFIERS	6	3
REMOTE RADIO UNITS (RRU)	3	3 (PLUS 3 RESERVED)
COAX LINES (7/8)	12	6 (PLUS 6 RESERVED)
POWER/FIBER HYBRID LINE	2	1
OVER VOLTAGE PROTECTION UNIT (OVP)	1	1



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DRAWING TITLE:

**PROPOSED
EQUIPMENT
HANDRAIL LAYOUT**

DRAWING NUMBER:

LTE-3

JOB NUMBER:

160953

GENERAL NOTES

1.0 EXCAVATION:

- A. IN AREAS OF SUB GRADE BACK FILL WORK, COMPACT THE TOP 12 INCHES.
- B. AFTER CONSTRUCTION HAS BEEN COMPLETED, GROUND SURFACES DISTURBED BY CONSTRUCTION SHALL BE GRADED. THE FINAL GRADING SHALL PROVIDE SMOOTH UNIFORM SURFACING AND EFFECTIVE DRAINAGE OF SUB GRADE TO A 95% COMPACTION OF THE BACK FILL MATERIAL.
- C. SURPLUS EARTH AND BACK FILL SHALL BE CONSIDERED PROPERTY OF THE CONTRACTOR AND LEGALLY DISPOSED OF BY THE CONTRACTOR OFF SITE.

2.0 TRENCHING GROUND LINES:

- A. EXISTING UTILITIES (INCLUDING, BUT NOT LIMITED TO POWER, TELCO, GAS, ETC.) MUST BE LOCATED BY THE LOCAL UTILITY COMPANY OR LOCATING SERVICE PRIOR TO THE TRENCHING ACTIVITIES.
- B. WHEN BEGINNING TRENCHING OR DIGGING, EITHER INSIDE OR OUTSIDE OF COMPOUND. EXISTING UNDERGROUND POWER AND TELCO MUST BE LOCATED BY HAND DIGGING TO ENSURE THE ACCURATE CONDUIT LOCATIONS.
- C. UNATTENDED OPEN TRENCHES MUST BE COVERED PER OSHA STANDARDS ON A DAILY BASIS BY CONTRACTOR. (NO EXCEPTIONS).
- D. WHEN WORK IS PERFORMED WHICH INVOLVES CROSSING OVER EXISTING CONDUITS, CONTRACTOR SHALL HAND DIG AND LOCATE EXISTING CONDUIT IN ORDER TO PREVENT DAMAGE TO EXISTING FACILITIES.
- E. CONTRACTOR TO ABIDE BY LOCAL JURISDICTION AND STATE CODES RELATIVE TO WORK BEING PERFORMED, AND IN ACCORDANCE WITH THE GENERAL TERMS AND CONDITIONS OF THE CONTRACT.

3.0 SITE NOTES:

- A. CONTRACTOR TO REMOVE RUBBISH, STUMPS, DEBRIS, STICKS, STONES, EXCESS MATERIAL AND OTHER REFUSE, AND DISPOSE OF THEM LEGALLY FROM THE SITE.
- B. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE COMPOUND OR ACCESS ROAD, SHALL BE FINISHED SO AS TO SHED WATER, FERTILIZED, SEEDED AND COVERED w/ MULCH.
- C. QUANTITY OF WORK SHOWN ON THE DRAWINGS IS FOR OWNERS INFORMATION AND USE. NO GUARANTEE AS TO THE ACCURACY OR COMPLETENESS OF SUCH QUANTITIES IS MADE OR IMPLIED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DEVELOP HIS OWN ESTIMATE AND ASSESSMENT AS TO THE AMOUNT OF WORK TO BE PERFORMED DURING THE PREPARATION OF THE PROPOSAL.

4.0 PHOTO DOCUMENTATION CIVIL CONTRACTOR.

- A. PRIOR TO CONSTRUCTION, SHOWING ACCESS AND SITE – 1 PICTURE LOOKING NORTH INTO SITE.
- B. PRIOR TO CONSTRUCTION, SHOWING ACCESS AND SITE – 1 PICTURE LOOKING SOUTH INTO SITE.
- C. PRIOR TO CONSTRUCTION, SHOWING ACCESS AND SITE – 1 PICTURE LOOKING WEST INTO SITE.
- D. PRIOR TO CONSTRUCTION, SHOWING ACCESS AND SITE – 1 PICTURE LOOKING EAST INTO SITE.
- E. TOWER FOUNDATIONS PRIOR TO POUR – 1 PICTURE PER FOUNDATION.
- F. TOWER FOUNDATION DURING POUR – 1 PICTURE PER FOUNDATION.
- G. CONCRETE TEST CYLINDERS – 1 PICTURE.
- H. GROUND RING PRIOR TO BACK FILL, TOWER RING – 3 PICTURES.
- I. GROUND RING PRIOR TO BACK FILL, BUILDING/SLAB RING – 3 PICTURES.
- J. GROUND RING PRIOR TO BACK FILL, FENCE RING – 3 PICTURES.
- K. GROUND CONNECTION TO EXISTING TOWER RING – 3 PICTURES (CO-LOCATE SITE).
- L. GROUND CONNECTION TO EXISTING FENCE RING – 3 PICTURES (CO-LOCATE SITE).
- M. GROUND LEADS CONNECTED TO INTERIOR BUILDING GROUND BAR – 1 PICTURE.
- N. MEGGAR INSTRUMENT READING, PRE TEST, CLOSE-UP – 1 PICTURE.
- O. MEGGAR INSTRUMENT READING, POST TEST, CLOSE-UP – 1 PICTURE.
- P. COMPOUND VIEW INCLUDING BUILDING/OUTDOOR EQUIPMENT – 1 PICTURE NORTH.
- Q. COMPOUND VIEW INCLUDING BUILDING/OUTDOOR EQUIPMENT – 1 PICTURE SOUTH.

- R. COMPOUND VIEW INCLUDING BUILDING/OUTDOOR EQUIPMENT – 1 PICTURE WEST.
- S. COMPOUND VIEW INCLUDING BUILDING/OUTDOOR EQUIPMENT – 1 PICTURE EAST.
- T. UTILITY TRENCH PRIOR TO BACK FILL – 3 PICTURES.
- U. UTILITY TRENCH 75% BACK FILL WITH WARNING TAPE – 3 PICTURES.
- V. UTILITY CONNECTION TO SHELTER/OUTDOOR EQUIPMENT – 1 PICTURE.
- W. H-FRAME WITH METER AND ELECTRIC METER GROUND ROD – 1 PICTURE.
- X. H-FRAME WITH POWER PROTECTION CABINET – 1 PICTURE.
- Y. COMPOUND SURFACE BEFORE ROCK, SHOWING FABRIC – 1 PICTURE.
- Z. COMPOUND SURFACE BEFORE ROCK, SHOWING FABRIC REPLACEMENT CO-LOCATION – AS NEEDED.
- AA. OVER ALL COMPLETE SITE AFTER FENCE – 2 PICTURES (DIFFERENT ANGLES).

TOWER CONTRACTOR – MAIN LINE:

- A. TOWER PANORAMIC VIEW FROM TOP OF TOWER – 1 PICTURE LOOKING NORTH.
 - B. TOWER PANORAMIC VIEW FROM TOP OF TOWER – 1 PICTURE LOOKING SOUTH.
 - C. TOWER PANORAMIC VIEW FROM TOP OF TOWER – 1 PICTURE LOOKING WEST.
 - D. TOWER PANORAMIC VIEW FROM TOP OF TOWER – 1 PICTURE LOOKING EAST.
 - E. DOWN VIEW OF TRANSMISSION LINES ON FACE OF TOWER – 1 PICTURE.
 - F. VIEW OF TOP GROUND BAR – 1 PICTURE.
 - G. VIEW OF TOP & MID (IF APPLICABLE) GROUND KITS INSTALLED ON MAIN LINES – ALL LINES.
 - H. VIEW OF MAIN LINE WEATHER PROOFING – ALL LINES.
 - I. VIEW OF ANTENNAE, JUMPER ROUTING AND COLOR CODING – 1 PICTURE PER SECTOR.
 - J. VIEW OF TMA'S, JUMPER ROUTING AND GROUNDING – 1 PICTURE PER TMA.
 - K. VIEW OF SPLITTERS AND CABLE ROUTING – 1 PICTURE PER SPLITTER.
 - L. VIEW OF MAIN LINES HOISTING GRPS – 1 PICTURE.
 - M. VIEW OF ICE BRIDGE SUPPORTING COAX – 1 PICTURE.
 - N. WAVE GUIDE ENTRY PORT INSIDE BUILDING – 1 PICTURE.
 - O. WAVE GUIDE ENTRY PORT OUTSIDE BUILDING – 1 PICTURE.
 - P. VIEW OF MAIN LINES TERMINATED ON GROUND BAR INSIDE SHELTER – 1 PICTURE.
 - Q. VIEW OF MAIN LINES TERMINATED ON GROUND BAR ON ICE BRIDGE POST – 1 PICTURE (OUTDOOR SITE).
 - R. VIEW OF DRIP LOOP AT BOTTOM OF TOWER – 1 PICTURE.
 - S. TOWER VIEW WITH ENTIRE TOWER AND EQUIPMENT ELEVATION – 2 PICTURES (DIFFERENT ANGLES).
- MICROWAVE:
- A. VIEW OF MICROWAVE DISH(ES) AND LINE ROUTING – AS NEEDED
 - B. VIEW OF ELLIPTICAL WAVE GUIDE RIP – 1 PICTURE
 - C. VIEW OF ELLIPTICAL WAVE GUIDE GROUND KITS – 1 PICTURE.
 - D. VIEW OF ELLIPTICAL WAVE GUIDE GROUND WIRE GROUNDED TO TOWER – 1 PICTURE.



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SITE NAME:

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GENERAL NOTES

DRAWING NUMBER:

LTE-4

JOB NUMBER:

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