

COMPOUND PLAN
SCALE: 1" = 10'-0"
0 5' 10' 20' 30'

GENERAL NOTES:

- THE TYPE, DIMENSIONS, MOUNTING HARDWARE, AND POSITIONS OF ALL PROJECT OWNER'S EQUIPMENT ARE SHOWN IN ILLUSTRATIVE FASHION. THESE DRAWINGS ARE NOT INTENDED FOR CONSTRUCTION. ACTUAL HARDWARE DETAILS AND FINAL LOCATIONS MAY DIFFER SLIGHTLY FROM WHAT IS SHOWN.
- THE PROJECT OWNER'S PCS FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
- THE PROJECT OWNER'S BASE TRANSMISSION STATION (BTS) CABINET IS A WEATHER RESISTANT, VANDAL RESISTANT STEEL CABINET CONTAINING RECTIFIERS, AMPLIFIERS, RADIOS, AND OTHER INTEGRATED ELECTRONIC CONTROL EQUIPMENT. THE BTS IS ENVIRONMENTALLY CONTROLLED BY A SELF-CONTAINED AC-POWERED HEATING AND COOLING SYSTEM USING CFC-FREE THERMAL TRANSFER COMPOUNDS. MANUFACTURER'S SPECIFICATIONS INDICATE THAT AT FULL LOAD CONDITIONS, MAXIMUM ACOUSTICAL NOISE LEVELS ARE 50DB(A) AT A DISTANCE OF 13 FEET AND 40 DB(A) AT A DISTANCE OF 46 FEET. BATTERY BACKUP FOR EMERGENCY STANDBY POWER IS CONTAINED WITHIN THE SEALED BTS CABINET AND CONSISTS OF FOUR 12-VOLT, CLOSED-CELL DC BATTERIES. THE BATTERIES ARE LEAD-ACID RECHARGEABLE STANDBY INDUSTRIAL POWER CELLS MANUFACTURED TO MEET ENVIRONMENTAL QUALITY AND RUGGEDNESS STANDARDS OF THE INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA). THE BATTERY CHARGING SYSTEM IS COMPUTER-CONTROLLED AND THE EQUIPMENT CABINET IS REMOTELY MONITORED AT PROJECT OWNER'S NETWORK OPERATIONS CONTROL CENTER 24-HOURS A DAY, 7 DAYS A WEEK FOR FAULTS AND ALARMS.
- THE DESIGN OF THE TOWER, FOUNDATION AND ANTENNA MOUNTING HARDWARE WILL MEET THE ANS/ISA/IEEE/UL-222-G STANDARDS FOR STRUCTURAL STEEL ANTENNA SUPPORTING STRUCTURES AND STATE BUILDING CODE REQUIREMENTS. DETAILED CONSTRUCTION DRAWINGS AND STRUCTURAL CALCULATIONS WILL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER AND SUBMITTED WITH A BUILDING PERMIT APPLICATION FOR REVIEW AND APPROVAL BY THE LOCAL BUILDING CODE ENFORCEMENT OFFICIAL.
- ONCE THE FACILITY BECOMES FULLY OPERATIONAL, NORMAL AND ROUTINE MAINTENANCE BY PROJECT OWNER'S TECHNICIANS WILL BE PERFORMED ON A MONTHLY BASIS. THEREFORE, THE ESTIMATED VEHICLE TRIP GENERATION RATE IS 2 TRIPS PER MONTH. THE AVERAGE DAILY TRIP GENERATION RATE (ADT) IS 0.07.
- PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. PROJECT OWNER'S IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. PROJECT OWNER'S RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.
- PERMANENT STANDBY EMERGENCY POWER WILL NOT BE UTILIZED BY PROJECT OWNER'S. IF NECESSARY, DURING AN EXTENDED POWER OUTAGE, A PORTABLE EMERGENCY GENERATOR WILL BE USED TO PROVIDE TEMPORARY EMERGENCY BACKUP POWER. THERE IS NO ON-SITE BULK STORAGE OF FLAMMABLE OR COMBUSTIBLE FUELS FOR OPERATING AN EMERGENCY GENERATOR FOR THE PROJECT OWNER'S EQUIPMENT.
- MARKING AND LIGHTING OF THE TOWER, IF REQUIRED BY THE FAA, WILL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF AN AIRSPACE SAFETY CONSULTANT AND WILL MEET ALL DESIGN GUIDELINES IN FAA AC 70/7460-1K. IF DAYTIME FAA OBSTRUCTION MARKING IS USED, PAINT ANTENNAS, MOUNTING HARDWARE, AND EXPOSED VERTICAL CABLE RUNS TO MATCH EXISTING TOWER BACKGROUND PATTERN (AVIATION ORANGE OR WHITE).
- THE TOTAL IMPACT AREA OF THE DISTURBED CONSTRUCTION SITE IS BOUNDED BY THE "LIMIT OF WORK" AS SHOWN HEREON. THE PROJECT OWNER'S GENERAL CONTRACTOR SHALL CONDUCT ALL SITE DEVELOPMENT WORK IN A MANNER THAT DOES NOT EXCEED THE LIMITS OF WORK SHOWN ON THE PLANS. ADDITIONALLY, THE PROJECT OWNER'S GENERAL CONTRACTOR SHALL CONDUCT ALL CONSTRUCTION ACTIVITIES IN A MANNER THAT DOES NOT RESULT IN STORM WATER DISCHARGES WITH AN ADVERSE IMPACT ON ANY STORM WATER COLLECTION/CONVEYANCE SYSTEM, WETLAND, WATER BODY, OR OTHER WATER RESOURCE AREAS.
- APPLICANT, LESSEE/LICENSEE AND PROJECT OWNER: T-MOBILE NORTHEAST LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
- PROPERTY OWNER: UNIVERSITY OF MAINE
107 MAIN AVENUE
BANGOR, ME 04401

NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS SHOWN HEREIN.
- ALL DIMENSIONS SHOWN THUS ± ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WHICH EFFECT THE CONTRACTORS WORK. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH PROJECT OWNER PRIOR TO CONSTRUCTION.
- NORTH ARROW SHOWN ON PLANS REFERS TO APPROXIMATE TRUE NORTH. PRIOR TO THE START OF CONSTRUCTION, ORDERING OR FABRICATING OF ANTENNA MOUNTS, CONTRACTOR SHALL CONSULT WITH PROJECT OWNER'S RF ENGINEER AND FIELD VERIFY ALL ANTENNA SECTOR LOCATIONS AND ANTENNA AZIMUTHS.
- THE CONTRACTOR AND OR HIS SUB CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
- ANTENNA INSTALLATION SHALL BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF RADIO ANTENNAS, TRANSMISSION LINES AND SUPPORT STRUCTURES.
- COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE PROVIDED BY THE PROJECT OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. A SCHEDULE OF PROJECT OWNER SUPPLIED MATERIALS IS ATTACHED TO THE BID DOCUMENTS (SEE EXHIBIT 3). ALL OTHER HARDWARE TO BE PROVIDED BY THE CONTRACTOR. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.
- WHEN "PAINT TO MATCH" IS SPECIFIED FOR ANTENNA CONCEALMENT, PAINT PRODUCT FOR ANTENNA RADOME SHALL BE SHERWIN WILLIAMS COROTHANE II. SURFACE PREPARATION AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND PROJECT OWNER'S GUIDELINES.
- COORDINATION, LAYOUT, AND FURNISHING OF CONDUIT, CABLE AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- ALL (E)ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW.
- ALL (E)INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF UTILITY COMPANY ENGINEERING.
- THE AREAS OF THE PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT, DRIVEWAY OR GRAVEL, SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED, SEEDDED AND COVERED WITH MULCH UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN SOIL EROSION AND SEDIMENTATION CONTROLS AT ALL TIMES DURING CONSTRUCTION.
- PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. PROJECT OWNER'S IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. PROJECT OWNER RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.

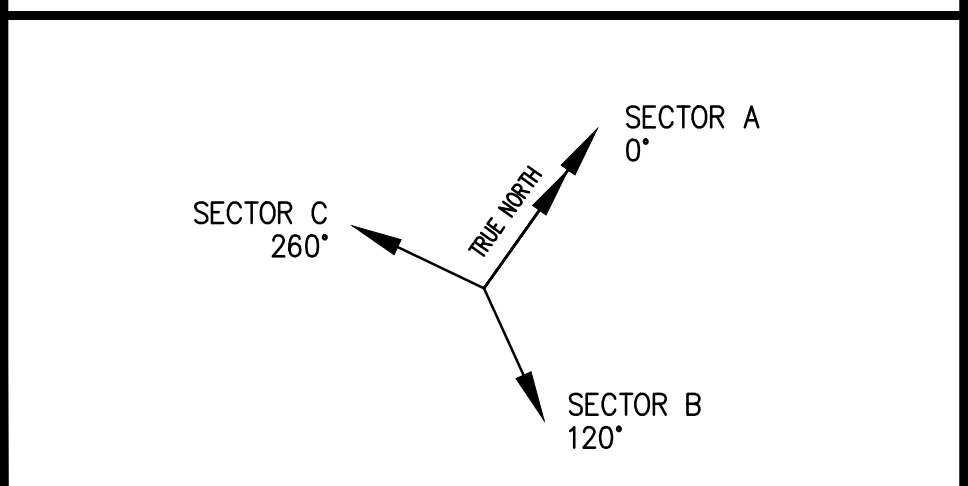
ABBREVIATIONS

| | | | |
|--------|----------------------------|-----|----------------------------------|
| ADJ | ADJUSTABLE | OC | ON CENTER |
| AGL | ABOVE GRADE LEVEL | OPP | OPPOSITE |
| APPROX | APPROXIMATE | SF | SQUARE FOOT |
| C | CONDUIT | SHT | SHEET |
| CONC | CONCRETE | SIM | SIMILAR |
| CONT | CONTINUOUS | STL | STEEL |
| CJ | CONSTRUCTION JOINT | TOC | TOP OF CONCRETE |
| DIA | DIAMETER | TOM | TOP OF MASONRY |
| DWG | DRAWING | TYP | TYPICAL |
| EGB | EQUIPMENT GROUND BAR | VF | VERIFY IN FIELD |
| EA | EACH | UG | UNDERGROUND |
| ELEC | ELECTRICAL | UON | UNLESS OTHERWISE NOTED |
| EL | ELEVATION | WWF | WELDED WIRE FABRIC |
| EQ | EQUAL | W/ | WITH |
| EQUIP | EQUIPMENT | BTS | BASE TRANSMISSION STATION |
| (E) | EXISTING | LNA | LOW NOISE AMPLIFIER |
| EXT | EXTERIOR | PCS | PERSONAL COMMUNICATIONS SERVICES |
| FCM | FIELD CONSTRUCTION MANAGER | | |
| FF | FINISHED FLOOR | | |
| FG | FINISHED GRADE | | |
| GA | GAUGE | | |
| GALV | GALVANIZED | A-1 | ANTENNA MARK NO. |
| GC | GENERAL CONTRACTOR | | |
| LG | LONG | PL | PLATE |
| MAX | MAXIMUM | & | AND |
| MECH | MECHANICAL | @ | AT |
| MFR | MANUFACTURER | | |
| MGB | MASTER GROUND BAR | | |
| MIN | MINIMUM | | |
| MTL | METAL | | |
| NIC | NOT IN CONTRACT | | |
| NTS | NOT TO SCALE | | |

SYMBOLS AND MATERIALS

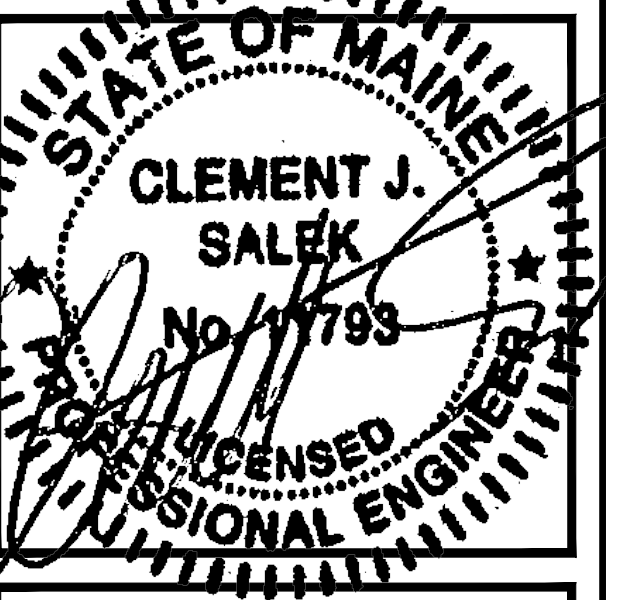
| | | | |
|--|---------------------|--|------------------|
| | NEW ANTENNA | | GROUT OR PLASTER |
| | EXISTING ANTENNAS | | (E)BRICK |
| | ASPHALT | | (E)MASONRY |
| | NEW ACCESS EASEMENT | | CONCRETE |
| | CONCRETE | | EARTH |
| | ELECTRIC BOX | | GRAVEL |
| | LIGHT POLE | | PLYWOOD |
| | FND. MONUMENT | | SAND |
| | SPOT ELEVATION | | WOOD CONT. |
| | SET POINT | | WOOD BLOCKING |
| | REVISION | | STEEL |
| | GRID REFERENCE | | CENTER LINE |
| | DETAIL REFERENCE | | PROPERTY LINE |
| | ELEVATION | | STEPPED FOOTING |
| | SECTIONS & DETAILS | | MATCH LINE |
| | | | WORK POINT |
| | | | GROUND WIRE |
| | | | COAXIAL CABLE |

ANTENNA ORIENTATION KEY



T-MOBILE NORTHEAST LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
OFFICE: (508) 286-2700
FAX: (508) 286-2893

CHAPPELL ENGINEERING ASSOCIATES, LLC
Civil-Structural-Land Surveying
R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST
SUITE 301
MARLBOROUGH, MA 01752
(508)481-7400
www.chappellengineering.com



APPROVALS

LANDLORD _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4PB-0360-A

DRAWN BY: CMC

CHECKED BY: JMT

SUBMITTALS

| | | |
|---|----------|-------------------|
| 0 | 11/24/14 | ISSUED FOR REVIEW |
|---|----------|-------------------|

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE NORTHEAST, LLC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.

4PB-0360-A
HARBOR TERRACE
284 DANFORTH STREET
PORTLAND, ME 04102

SHEET TITLE

COMPOUND PLAN & NOTES

SHEET NUMBER

A-1