



SITE NAME: CO0190-PHASE 1A
SITE NUMBER: DN72XC020
AUGMENT ID: DN72XC020M17.1
ADDRESS: 4496 E BLANEY ROAD
PEYTON, CO 80831
JURISDICTION: EL PASO COUNTY
PIKES PEAK REGIONAL BUILDING DEPARTMENT
SITE TYPE: 260'-0" SELF-SUPPORT TOWER
PROGRAM TYPE: MWDO PROJECT

CARRIER:



PLAN PREPARED FOR:



PLAN PREPARED BY:



LETS America, Inc.
 112 S. KYRENE RD. STE. 1
 CHANDLER, AZ 85226
 ARIZONA: 480-961-9151
 LETS PROJ. #: LETS-751-MWDO

PROJECT INFORMATION	
COUNTY:	EL PASO
SITE NAME:	CO0190 - PHASE 1A
SITE NUMBER:	DN72XC020
AUGMENT ID:	DN72XC020M17.1
SITE ADDRESS:	4496 E BLANEY ROAD PEYTON, CO 80831
LATITUDE:	38° 53' 42" N (NAD '83)
LONGITUDE:	104° 35' 51" W (NAD '83)
GROUND ELEVATION:	6791' ASML (NAVD '88)
ZONING CLASSIFICATION:	RR-5 - RESIDENTIAL RURAL
APN#:	433000001
TOWER OWNER:	AMERICAN TOWER CORPORATION 10 PRESIDENTIAL WAY WOBURN, MA 01801 PHONE: (781) 926-4500 FAX: (781) 926-4555
LANDLORD:	AMERICAN TOWER CORPORATION 10 PRESIDENTIAL WAY WOBURN, MA 01801 PHONE: (781) 926-7869
CONTACT:	
APPLICANT:	SAC WIRELESS ON BEHALF OF SPRINT
SPRINT PROJECT MANAGER:	JODI JONES
A&E FIRM:	LETS AMERICA INC. 112 S. KYRENE ROAD, SUITE 1 CHANDLER, AZ. 85226 PHONE: (480) 961-9151 EMAIL: INFO@LETSINC.COM



INDEX OF DRAWINGS		
SHEET	DESCRIPTION	REVISION
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A-1	OVERALL & ENLARGED SITE PLANS	0
A-2	EXISTING & NEW ANTENNA LAYOUTS, MOUNTING & SCHEDULE	0
A-3	EXISTING & NEW ELEVATIONS	0
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REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	10/07/17	90% CD'S	SVP
B	10/20/17	95% CD'S	SVP
0	10/27/17	100% CD'S	SVP

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF COLORADO"

PROJECT CONSULTANTS	
PROJECT MANAGEMENT:	SAC WIRELESS: ENGINE ROOM 540 W. MADISON ST., 17TH FLR CHICAGO, ILLINOIS 60661 TEL: (312) 895-4977 WWW.SACW.COM
PROFESSIONAL ENGINEER:	LETS AMERICA INC. 112 S. KYRENE ROAD, SUITE 1 CHANDLER, AZ. 85226 PHONE: (480) 961-9151 EMAIL: INFO@LETSINC.COM
SPRINT RF ENGINEER:	DEVESH RANGNEKAR
SITE ACQUISITION & ZONING:	SAC WIRELESS: ENGINE ROOM 540 W. MADISON ST. 17TH FLR CHICAGO, ILLINOIS 60661 TEL: (312) 895-4977 WWW.SACW.COM
CONSTRUCTION MANAGER:	MARK WEAVER TEL: (949) 748-3482 MARK.2.WEAVER@SPRINT.COM

EQUIPMENT LIST
<ul style="list-style-type: none"> INSTALL (1) NEW IBR MODEL: FASTBACK IBR 1300 INTEGRATED @ 204'-0" RAD CENTER @ 11.5885° AZIMUTH INSTALL (1) NEW 260'-0" CAT5E CABLE FROM EQUIPMENT CABINET TO NEW ANTENNA AS REQUIRED

DIRECTIONS

DIRECTIONS FROM: DENVER AIRPORT STATION DENVER, CO 80249

- CONTINUE TO PEÑA BLVD
- TAKE E-470 S AND I-25 S TO E WOODMEN RD IN COLORADO SPRINGS. TAKE THE EXIT FOR WOODMEN ROAD FROM CO-21 S
- CONTINUE ON E WOODMEN RD TO YOUR DESTINATION

ARRIVE AT: 4496 E BLANEY ROAD PEYTON, CO 80831

SPECIAL NOTES

- ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH CURRENT SPRINT CONSTRUCTION INSTALLATION GUIDE.
- EXISTING CONDITIONS WILL BE CHANGED & VERIFIED IN FIELD. IF SIGNIFICANT DEVIATIONS OR DETERIORATION ARE ENCOUNTERED AT THE TIME OF CONSTRUCTION, A REPAIR PERMIT WILL BE OBTAINED & CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
- CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
- THESE DRAWINGS ARE FULL SIZE & SCALABLE ON 22"x34" SHEET SIZE & ARE NOT REDUCED IN SIZE.
- STATEMENT THAT COMPLIANCE WITH THE ENERGY CODE IS NOT REQUIRED. SCOPE OF WORK DOES NOT INVOLVE MODIFICATIONS TO EXTERIOR ENVELOPE OF BUILDING, HVAC SYSTEMS OR ELECTRICAL LIGHTING.

811
Know what's below. Call before you dig.

TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN COLORADO, CALL COLORADO 811
 TOLL FREE: 1-800-922-1987 OR www.co811.org
 COLORADO STATUTE REQUIRES MIN OF 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT OR ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CODE COMPLIANCE

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

- 2015 INTERNATIONAL BUILDING CODE
- 2015 INTERNATIONAL EXISTING BUILDING CODE
- 2015 INTERNATIONAL FIRE CODE
- 2014 NATIONAL ELECTRICAL CODE
- 2011 PIKES PEAK REGIONAL BUILDING CODE

ACCESSIBILITY REQUIREMENTS:
 FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2006 NEVADA BUILDING CODE.

APPROVALS		
DISCIPLINE:	SIGNATURE	DATE
LANDLORD:		

DN72XC020
 DN72XC020M17.1
 CO0190 - PHASE 1A
 4496 E BLANEY ROAD
 PEYTON, CO 80831

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1

- THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE.
- THIS FACILITY IS EXEMPT FROM HANDICAP REQUIREMENTS PER 2013 CBC SECTION 1105B.3.4 EXCEPTION #1. THIS FACILITY IS NON-OCCUPABLE SPACE AND ENTERED ONLY BY SERVICE PERSONNEL. THIS SPACE IS NOT FOR HUMAN OCCUPANCY.
- CONTRACTOR WILL PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, SAFETY EQUIPMENT, TRANSPORTATION AND SERVICES NECESSARY TO COMPLETE ALL THE WORK OUTLINED IN ALL DRAWINGS, SPECIFICATIONS, SCOPES OF WORK, BILL OF MATERIALS, AND ANY OTHER DOCUMENT ISSUED BY SPRINT.
- THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND NATIONAL CODES, LAWS, ORDINANCES, REGULATIONS, SAFETY REGULATIONS, ALL OSHA REGULATIONS, ALL PUBLIC AND MUNICIPAL AUTHORITIES AND ANY UTILITY COMPANIES REGULATIONS AND DIRECTIVES.
- ANY CONTRACTOR SUBMITTING BIDS ON ANY OF THE WORK IS REQUIRED TO VISIT EACH SITE PRIOR TO BID SUBMITTAL AND FAMILIARIZE HIMSELF/HERSELF WITH THE EXISTING CONDITIONS AND UNDERSTAND THE SCOPE OF WORK INTENDED FOR THE PROJECT. THIS WILL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
- THE SUCCESSFUL CONTRACTOR SHALL PROVIDE A SCHEDULE, LIST OF ALL SUBCONTRACTORS WITH ADDRESSES, CELL PHONE NUMBERS AND HOME PHONE NUMBERS, VERIFICATION OF INSURANCE, ANY AND ALL PERTINENT LICENSES AND AN ACCURATE SCHEDULE FOR THE PROJECT PRIOR TO THE ISSUANCE OF A NTP.
- THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK AT THE SITE PRIOR TO A NOTICE TO PROCEED (NTP) BEING ISSUED AND A PRE-CONSTRUCTION MEETING AT THE SITE HAVING TAKEN PLACE.
- ALL WORK AND MATERIALS FURNISHED BY THE CONTRACTOR SHALL HAVE A WRITTEN ONE-YEAR WARRANTY STARTING AT THE ACCEPTANCE OF THE SITE FROM THE SITE OWNER.
- ALL MATERIALS SUPPLIED BY THE OWNER, OWNER'S REPRESENTATIVE, AND THE CONTRACTOR, SHALL BE INSTALLED IN ACCORDANCE WITH ALL LOCAL AND NATIONAL CODES, LAWS, ORDINANCES, REGULATIONS AND PER MANUFACTURER'S RECOMMENDATIONS.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR HAS THE RESPONSIBILITY TO LOCATE ALL EXISTING UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR OR SUBCONTRACTOR SHALL BEAR THE EXPENSE OF REPAIRING OR REPLACING ANY DAMAGE TO THE UTILITIES CAUSED DURING THE EXECUTION OF THE WORK. CONTACT USA DIG ALERT.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW OR EXISTING SURFACES, STRUCTURES OR EQUIPMENT SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE PROPERTY OWNER. THE CONTRACTOR SHALL BEAR THE EXPENSE OF REPAIRING OR REPLACING ANY DAMAGED AREAS.
- THE CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES AS THEY MAY BE DISCOVERED IN THE PLANS, SPECIFICATIONS, & NOTES PRIOR TO STARTING CONSTRUCTION, INCLUDING BUT NOT LIMITED BY DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERRORS, OMISSION, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER AND SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE METHOD OF CORRECTION SHALL BE APPROVED BY THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT.
- THE CONTRACTOR SHALL HAVE A DESIGNATED MANAGER ON SITE AT ALL TIMES THAT ANY WORK IS BEING PERFORMED. A SUBCONTRACTOR IS NOT DEFINED AS A DESIGNATED MANAGER.
- A COPY OF THE APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY LAW SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL CONSTRUCTION SETS REFLECT THE SAME INFORMATION AS THE APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS AT THE SITE FOR THE PURPOSE OF DOCUMENTING ALL AS-BUILT CHANGES, REVISIONS, ADDENDA, OR CHANGE ORDERS. THE CONTRACTOR SHALL FORWARD THE AS-BUILT/HIRED DRAWINGS TO THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT AT THE CONCLUSION OF THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE WHILE THE WORK IS IN PROGRESS UNTIL THE JOB IS COMPLETE.
- ALL SITES SHALL BE KEPT CLEAN AND FREE OF DEBRIS ON A DAILY BASIS. ALL TRASH AND MATERIALS NO LONGER BEING USED AT THE SITE MUST BE REMOVED AND PROPERLY DISPOSED OF ON A DAILY BASIS.
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY POWER, WATER, AND TOILET FACILITIES AS REQUIRED BY THE PROPERTY OWNER OR GOVERNING AGENCY.
- ALL CONSTRUCTION THROUGH THE PROJECT SHALL CONFORM TO THE LATEST C.B.C. AND ALL OTHER GOVERNING CODES, INCLUDING THE CALIFORNIA ADMINISTRATIVE CODES TITLE 8, 19, AND 24. THE MOST RESTRICTIVE CODE SHALL GOVERN.
- WHEN REQUIRED STORAGE OF MATERIALS OCCURS, THEY SHALL BE EVENLY DISTRIBUTED OVER THE FLOOR OR ROOF SO AS NOT TO EXCEED THE DESIGNED LIVE LOADS FOR THE STRUCTURE. TEMPORARY SHORING OR BRACING SHALL BE PROVIDED WHERE THE STRUCTURE OR SOIL HAS NOT ATTAINED THE DESIGN STRENGTH FOR THE CONDITIONS PRESENT.
- THE CONTRACTOR SHALL SUPERVISE AND COORDINATE ALL WORK, USING HIS PROFESSIONAL KNOWLEDGE AND SKILLS. HE IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES AND SEQUENCING AND COORDINATING ALL PORTIONS OF THE WORK UNDER THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS WITH RESPECT TO THE WORK TO COMPLETE THE PROJECT. BUILDING PERMIT APPLICATIONS SHALL BE FILED BY THE OWNER OR AUTHORIZED AGENT. CONTRACTOR SHALL OBTAIN THE PERMIT AND MAKE FINAL PAYMENT OF SAID DOCUMENT.
- ALL DIMENSIONS TAKE PRECEDENCE OVER SCALE. DRAWINGS ARE NOT TO BE SCALED UNDER ANY CIRCUMSTANCES.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS OR SUPPORTS FOR INSTALLATION OF ITEMS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING ALL INSPECTIONS AND TESTING REQUIRED FOR EACH PROJECT. A 24-HOUR NOTIFICATION TO SPRINT IS REQUIRED FOR ALL INSPECTIONS AND TESTING. A FIELD COPY OF ALL INSPECTIONS AND TESTING REPORTS AS WELL AS TRUCK TICKETS MUST BE SUBMITTED TO THE OWNERS REPRESENTATIVE WITHIN 24-HOURS OF THE INSPECTION OR TEST.
- THE CONTRACTOR SHALL PROVIDE THE FIRE MARSHALL U.L. APPROVED MATERIALS TO FILL/SEAL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES.
- NEW CONSTRUCTION ADDED TO EXISTING CONSTRUCTION SHALL BE MATCHED IN FORM, TEXTURE, MATERIAL AND PAINT COLOR EXCEPT AS NOTED IN THE PLANS.
- MATERIALS TESTING SHALL BE TO THE LATEST STANDARDS AVAILABLE AS REQUIRED BY THE LOCAL GOVERNING AGENCY RESPONSIBLE FOR APPROVING THE RESULTS.
- ALL GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE.
- ALL DEBRIS AND REFUSE IS TO BE REMOVED FROM THE PROJECT. PREMISES SHALL BE LEFT IN A CLEAN BROOM FINISHED CONDITION AT ALL TIMES.
- BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GRADING AND CONSTRUCTION EFFORT AS MANDATED BY THE GOVERNING AGENCY.
- ALL SYMBOLS AND ABBREVIATIONS ARE CONSIDERED CONSTRUCTION INDUSTRY STANDARDS. IF A CONTRACTOR HAS A QUESTION REGARDING THEIR EXACT MEANING THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT SHALL BE NOTIFIED FOR CLARIFICATIONS.
- BUILDINGS UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION SHALL BE IN ACCORDANCE WITH 2013 CFC SECTION 1401 AND ALL GOVERNING CODES.
- ADDRESS SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS IN A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.(2013 CFC SECTION 505.1)
- DECORATIVE MATERIALS SHALL BE MAINTAINED IN A FLAME-RETARDANT CONDITION.(2013 CFC SECTION 807-1.2)
- PORTABLE FIRE EXTINGUISHERS: AT LEAST ONE FIRE EXTINGUISHER WITH A MINIMUM RATING OF 2-A-10B-C SHALL BE PROVIDED WITHIN 75 FEET MAXIMUM TRAVEL DISTANCE FOR EACH 6,000 SQUARE FEET OR PORTION THEREOF ON EACH FLOOR.(2013 CFC SECTION 906.1.1 AND SECTION 906.3.1)
- THE CONTRACTOR IS RESPONSIBLE TO VERIFY ALL MATERIALS ISSUED TO THEM AND REPORT ANY SHORTAGES AND DISCREPANCIES TO VENDOR(S) AT THE TIME OF ISSUANCE. THE CONTRACTOR SHALL STORE THESE MATERIALS PROPERLY, ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND IN A MANNER THAT WILL NOT VOID THE WARRANTY ON ANY ITEM. IF ANY ITEM IS DAMAGED OR UNUSABLE DUE TO IMPROPER HANDLING AND STORAGE THE CONTRACTOR WILL REPLACE IT AT THEIR EXPENSE.
- THE CONTRACTOR IS RESPONSIBLE TO FURNISH PROPER FACILITIES FOR THE WORKERS ON EACH PROJECT FOR THE DURATION OF THAT PROJECT.
- THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE PRESENT CONDITION OF ANY EXISTING BUILDINGS, LANDSCAPING, FENCING, EQUIPMENT, WALKS, DRIVE, AND ATTACHMENTS. IF ANY DAMAGE SHOULD OCCUR, THE CONTRACTOR IS RESPONSIBLE TO RESTORE THE DAMAGE TO A BETTER OR NEW CONDITION.
- THE SPRINT REPRESENTATIVE RESERVES THE RIGHT TO RELOCATE ANY EQUIPMENT WITHIN 10 FT. OF THE LOCATION SPECIFIED ON THESE DRAWINGS PRIOR TO INSTALLATION BY THE CONTRACTOR.
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE SPRINT REPRESENTATIVE.
- CONTRACTOR IS RESPONSIBLE FOR FIELD MEASUREMENTS TO CONFIRM LENGTHS OF CABLE TRAYS, AND ELECTRICAL LINES.
- THE CONTRACTOR IS RESPONSIBLE TO OBTAIN AND PAY FOR ALL ELECTRICAL PERMITS AND INSPECTIONS REQUIRED FOR COMPLETION OF WORK AND ACCEPTANCE. PROVIDE CERTIFICATES TO THE CONSTRUCTION MANAGER VERIFYING THAT THE WORK CONFORMS TO THE REQUIREMENTS OF ALL CODES AND AUTHORITIES HAVING JURISDICTION.
- NO DEVIATIONS FROM DESIGN SHOWN ON THESE DRAWINGS IS ALLOWED, WITHOUT PRIOR WRITTEN APPROVAL FROM THE ARCHITECT OR ENGINEER OF RECORD. FAILURE TO OBSERVE THIS RULE MAY RESULT IN THE CONTRACTOR CORRECTING THE INSTALLATION AT THEIR EXPENSE.
- VERIFICATION THAT THE EXISTING ROOFTOP CAN SUPPORT THE PROPOSED ANTENNA LOADING IS TO BE DONE BY OTHERS.
- PROVIDE SUPPORT FOR THE ANTENNA CABLES TO THE ELEVATION OF ALL INITIAL AND FUTURE ANTENNAS. ANTENNA CABLES ARE TO BE SUPPORTED AND RESTRAINED AT THE CENTERS SUITABLE TO THE MANUFACTURER'S REQUIREMENTS.
- SAC WIRELESS, OR ANY REGISTERED PROFESSIONAL ENGINEER EMPLOYED OR CONTRACTED BY SAC WIRELESS, DOES NOT CERTIFY THE STRUCTURAL INTEGRITY OF THE CONSTRUCTION CONTAINED HEREIN UNLESS SAC WIRELESS HAS BEEN CONTRACTED TO PERFORM A STRUCTURAL ANALYSIS AND THEREBY ADDITIONAL DOCUMENTATION IS REQUIRED.
- THE CONTRACTOR SHALL GRUB THE SITE AREA AND ANY ACCESS ROAD CLEARING AND REMOVE A MINIMUM OF 6" TO ACHIEVE A STABLE SUB-BASE TO ACCEPT FILL OR OTHER MATERIAL SPECIFIED FOR THE SITE AND ACCESS ROAD. THE GRUBBING SHALL BE REMOVED FROM THE SITE AND NOT REUSED IN ANY PART OF THIS PROJECT.
- IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO CALL THE LOCAL LOCATING AUTHORITIES TO VERIFY THE LOCATION OF ANY UNDERGROUND UTILITIES THAT EXIST WITHIN THE ENTIRE PROJECT AREA. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND RELOCATION (AS NECESSARY) OF THE UNDERGROUND UTILITIES OR LINES. THE CONTRACTOR SHALL PLACE THESE ITEMS ON THE AS BUILT DRAWINGS.
- ALL ROADWORK AND MATERIALS SHALL CONFORM TO ALL STATE AND LOCAL CODES AND IN ACCORDANCE WITH THE DEPARTMENT OF HIGHWAY AND PUBLIC TRANSPORTATION STANDARD SPECIFICATIONS.
- THE ACCESS ROAD, IF REQUIRED, WILL BE CONSTRUCTED FIRST BEFORE ANY OTHER WORK ON THE SITE IS PERMITTED. BRING THE ROAD TO SUB BASE COURSE TO ALLOW CONSTRUCTION TRAFFIC TO USE THE ROAD FOR THE PROJECT AND COMPLETE THE ROAD AFTER CONSTRUCTION OF THE SITE IS SUBSTANTIALLY COMPLETE.
- ALL SITES AND ACCESS ROADS ARE TO BE CONSTRUCTED TO HAVE A POSITIVE DRAINAGE FLOW AWAY FROM THE SITE AND EQUIPMENT. ANY DISCREPANCIES IN THE DRAWINGS OR SPECIFICATIONS MUST BE BROUGHT TO THE ATTENTION OF SPRINT IMMEDIATELY.
- ALL ACCESS ROAD AND SITE AREAS WILL HAVE AN UNDERLAYMENT OF MIRAFI-500X, OR EQUAL.
- A SOIL STERILIZER SHALL BE APPLIED TO ALL GRAVEL SURFACES AND BE EPA REGISTERED LIQUID COMPOSITION AND OF PRE-EMERGENCE DESIGN. THE PRODUCT LABEL AND INFORMATION WILL BE GIVEN TO SPRINT.
- SUB-BASE COURSE OF GRANULAR "B" MATERIAL SHALL CONSIST OF WELL GRADED SAND AND GRAVEL WITH NOT MORE THAN 8% PASSING THROUGH #200 SIEVE WITH NOT LESS THAN 35% RETAINED ON A #4 SIEVE. CONTRACTOR TO SUPPLY GRADUATION FOR REVIEW PRIOR TO PLACEMENT.
- BASE COURSE OF GRANULAR "A" MATERIAL SHALL CONSIST OF 3/4" CRUSHED SAND AND GRAVEL (ROAD MULCH) WITH NOT MORE THAN 8% PASSING THROUGH #200 SIEVE. CONTRACTOR TO SUPPLY GRADUATION FOR REVIEW PRIOR TO PLACEMENT.
- ALL FILL DIRT SHALL BE CLEAN AND NATURAL. FREE FROM AN DELETERIOUS MATERIALS, ROOTS, ICE, SNOW AND RUBBISH. A COPY OF ALL DELIVERY TICKETS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE WITHIN 24-HOURS FROM DELIVERY.
- ALL TRENCHES SHALL HAVE A SIX-INCH BASE OF CLEAN SAND FILL TO ACCEPT THE CONDUITS AND THEN ANOTHER 12" OF CLEAN SAND FILL ON TOP OF THE CONDUITS. THE REMAINDER OF THE TRENCH SHALL HAVE A CLEAN COMPACTABLE FILL PLACED IN MAXIMUM LIFTS OF 8" AND MECHANICALLY COMPACTED TO A DENSITY OF 98% OF STANDARD PROCTOR MAXIMUM DENSITY.
- METALLIC WARNING TAPE SHALL BE PLACED AT 12" BELOW FINISHED GRADE ALONG THE ENTIRE TRENCH.
- ALL COMPACTION OF SITE AREAS SHALL BE ACCOMPLISHED BY MECHANICAL MEANS. LARGER AREAS SHALL BE COMPACTED BY A SHEEP'S FOOT VIBRATORY ROLLER WEIGHING AT LEAST 5 TONS. SMALLER AREAS SHALL BE COMPACTED BY A POWER DRIVEN HAND HELD TAMPER. ALL COMPACTED AREAS SHALL BE COMPACTED TO WITHIN 95% OF STANDARD PROCTOR MAXIMUM DENSITY AND TESTED BY AN INDEPENDENT LABORATORY. THE OWNER'S REPRESENTATIVE WILL PROVIDE THE CONTRACTOR WITH THE NAME AND NUMBER OF THE LABORATORY, BUT IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE TESTING. ANY SCHEDULING FOR A PROCTOR WILL BE THE CONTRACTOR'S RESPONSIBILITY AND MUST BE DONE IN A TIMELY FASHION TO ASSURE THE PROJECT WILL NOT BE DELAYED.
- FINISH GRADE, INCLUDING TOP SURFACE COURSE SHALL EXTEND 12" BEYOND THE SITE FENCE AND SHALL COVER THE AREA AS INDICATED.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONTAINMENT OF SEDIMENT AND CONTROL OF EROSION ON SITE. ANY DAMAGE TO STRUCTURES OR WORK ON SITE CAUSED BY INADEQUATE MAINTENANCE OF DRAINAGE PROVISIONS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ANY COST ASSOCIATED WITH REPAIRS WILL BE AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CORRECT ALL DAMAGE TO THE SITE SUBSEQUENT TO THE INSTALLATION OF THE POWER AND TELCO LINES.

GENERAL NOTES

SCALE N.T.S. 2

ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION
A.B.	ANCHOR BOLT	DEG.	DEPARTMENT	ICGB.	ISOLATED COPPER	STD.	STANDARD
ABV.	ABOVE	D.F.	DOUGLAS FIR	IGR	GROUND BUS	STL.	STEEL
AC	AIR CONDITIONING	DIAM. (Ø)	DIAMETER	IN. (")	INCH(ES)	STRUC.	STRUCTURAL
ACU	AIR CONDITIONING UNIT	DR.	DRAWING(S)	INT.	INTERIOR	T.B.D.	TO BE DETERMINED
ACCA	ANTENNA CABLE COVER ASSY.	DWG.	DRAWING(S)	LB. (#)	POUND(S)	T.B.R.	TO BE RESOLVED
ADD'L	ADDITIONAL	DWL.	DOWEL(S)	L.F.	LINEAR FEET (FOOT)	TEMP.	TEMPORARY
A.F.F.	ABOVE FINISHED FLOOR	EA.	EACH	L.	LONG(ITUDINAL)	THK.	THICK(NESS)
A.F.G.	ABOVE FINISHED GRADE	EBX	ELECTRICAL BOX	MGB	MASTER ROUND BUS	TMA	TOWER MOUNTED AMPLIFIER
A.G.L.	ABOVE GRADE LEVEL	EG	EQUIPMENT GROUND	MAS.	MASONRY	T.N.	TOE NAIL
ALUM.	ALUMINUM	EGR	EQUIPMENT GROUND RING	MAX.	MAXIMUM	T.O.A.	TOP OF ANTENNA
ALT.	ALTERNATE	EL.	ELEVATION	M.B.	MACHINE BOLT	T.O.C.	TOP OF CURB
ANT.	ANTENNA	EM.	ELECTRICAL	MECH.	MECHANICAL	T.O.F	TOP OF FOUNDATION
APPRX.	APPROXIMATE(LY)	ELEV.	ELEVATOR	MFR.	MANUFACTURER	T.O.P.	TOP OF PLATE (PARAPET)
APX	APEX	EM	ELECTRICAL METER	MIN.	MINIMUM	T.O.S.	TOP OF STEEL
ARCH.	ARCHITECT(URAL)	E.M.T.	ELECTRICAL METAL TUBING	MISC.	MISCELLANEOUS	T.O.W.	TOP OF WALL
ASSY.	ASSEMBLY	E.N.	EDGE NAIL	MTL.	METAL	TYP.	TYPICAL
AWG.	AMERICAN WIRE GAUGE	ENG.	ENGINEER	MW	MICROWAVE	U.L.	UNDER GROUND UNDERWRITERS LABORATORY
BCN	BEACON	E.O.P.	EDGE OF PAVEMENT	(N)	NEW	U.O.N.	UNLESS NOTED OTHERWISE
BD.	BOLLARD	EQ. (=)	EQUAL	NO. (#)	NUMBER	U.P.	UTILITY POLE
BDK	BRASS DISK	EVT	ELECTRICAL VAULT	N.T.S.	NOT TO SCALE	V.I.F.	VERIFY IN FIELD
BLDG.	BUILDING	EXP.	EXPANSION	OH.	OVERHEAD	W.	WIDE(WIDTH)
BLK.	BLOCK	EXST.	EXISTING	OHP	OVERHEAD POWER LINE	W/	WITH
BLKG.	BLOCKING	EXT.	EXTERIOR	OPNG.	OPENING	WD.	WOOD
BM	BEAM/BENCHMARK	FAB.	FABRICATION(OR)	P/C	PRECAST CONCRETE	W.P.	WEATHERPROOF
B.N.	BOUNDARY NAILING	F.F.	FINISH FLOOR	PLY.	PLYWOOD	WT.	WEIGHT
BTCW.	BARE TINNED COPPER WIRE	F.G.	FINISH GRADE	PPC	POWER PROTECTION CABINET		
B.O.F.	BOTTOM OF FOOTING	FIN.	FINISH(ED)	PRC	PRIMARY RADIO CABINET		
BTM.	BOTTOM	FLR.	FLOOR	P.S.F.	POUNDS PER SQUARE FOOT		
BRC.	BRACE	FLS.	FOUNDATION	P.S.I.	POUNDS PER SQUARE INCH		
BTS	BASE TRANSCIEVER STATION	F.O.C.	FACE OF CONCRETE	P.T.	PRESSURE TREATED POWER (CABINET)		
B.W.F.	BARBED WIRE FENCE	F.O.M.	FACE OF MASONRY	PWR.	POWER (CABINET)		
B/U	BACK-UP CABINET	F.O.S.	FACE OF STUD	QTY.	QUANTITY		
CAB.	CABINET	F.O.W.	FACE OF WALL	R.	RADIUS		
CANT.	CANTILEVER(ED)	F.S.	FINISHED SURFACE	RAF. CTR.	RADIATION CENTER		
C.I.P.	CAST IN PLACE CONSTRUCTION	FT. (')	FOOT(FEET)	RSB.	RADIO BASE STATION REFERENCE		
C.L.F.	CHAIN LINK FENCE	FTG.	FOOTING	REF.	REFERENCE		
CLG.	CEILING	GA.	GAUGE	REIN.F.	REINFORCEMENT(ING)		
CLR.	CLEAR	G.I.	GALVANIZE(D)	REQD.	REQUIRED		
COL.	COLUMN	G.F.I.	GROUND FAULT INTERRUPTER	RF	RADIO FREQUENCY		
CONC.	CONCRETE	GEN	GENERATOR	RGS	RIGID GALVANIZED STEEL		
CONN.	CONNECTION(OR)	GLB.	GLUE LAMINATED BEAM	RRU	REMOTE RADIO UNIT		
CONST.	CONSTRUCTION	GPS.	GLOBAL POSITIONING SYSTEM	RRH	REMOTE RADIO HEAD		
CONT.	CONTINUOUS	GRC.	GROWTH RADIO CABINET	SCH.	SCHEDULE		
CPD	CONCRETE PAD	GRD.	GROUND	SHT.	SHEET		
C.T.	CABLE TRAY	HDR.	HEADER	SIM.	SIMILAR		
d	PENNY (NAILS)	HGR.	HANGER	SPEC.	SPECIFICATION(S)		
DBL.	DOUBLE	HT.	HEIGHT	SP	STEEL PLATE		
DEF.	DEFINITION			SQ.	SQUARE		
				S.A.	STAINLESS STEEL		

ABBREVIATIONS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	NEW IBR 1300		GRID REFERENCE
	NEW ANTENNA		DETAIL REFERENCE
	EXISTING ANTENNA		ELEVATION REFERENCE
	EXISTING MW ANTENNA		SECTION REFERENCE
	GROUND ROD		GROUT OR PLASTER
	GROUND BUS BAR		EXISTING BRICK
	MECHANICAL GRND. CONN.		EXISTING MASONRY
	CADWELD		CONCRETE
	GROUND ACCESS WELL		EARTH
	ELECTRIC BOX		GRAVEL
	TELEPHONE BOX		PLYWOOD
	LIGHT POLE		SAND
	FND. MONUMENT		STEEL
	SPOT ELEVATION		WOOD CONT.
	SET POINT		WOOD BLOCKING
	REVISION		

LEGEND

SCALE N.T.S. 3



PLAN PREPARED FOR:



PLAN PREPARED BY:



REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	10/07/17	90% CD'S	SVP
B	10/20/17	95% CD'S	SVP
0	10/27/17	100% CD'S	SVP

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



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DN72XC020
DN72XC020M17.1
CO0190 - PHASE 1A
4490 E BLANEY ROAD
PEYTON, CO 80831

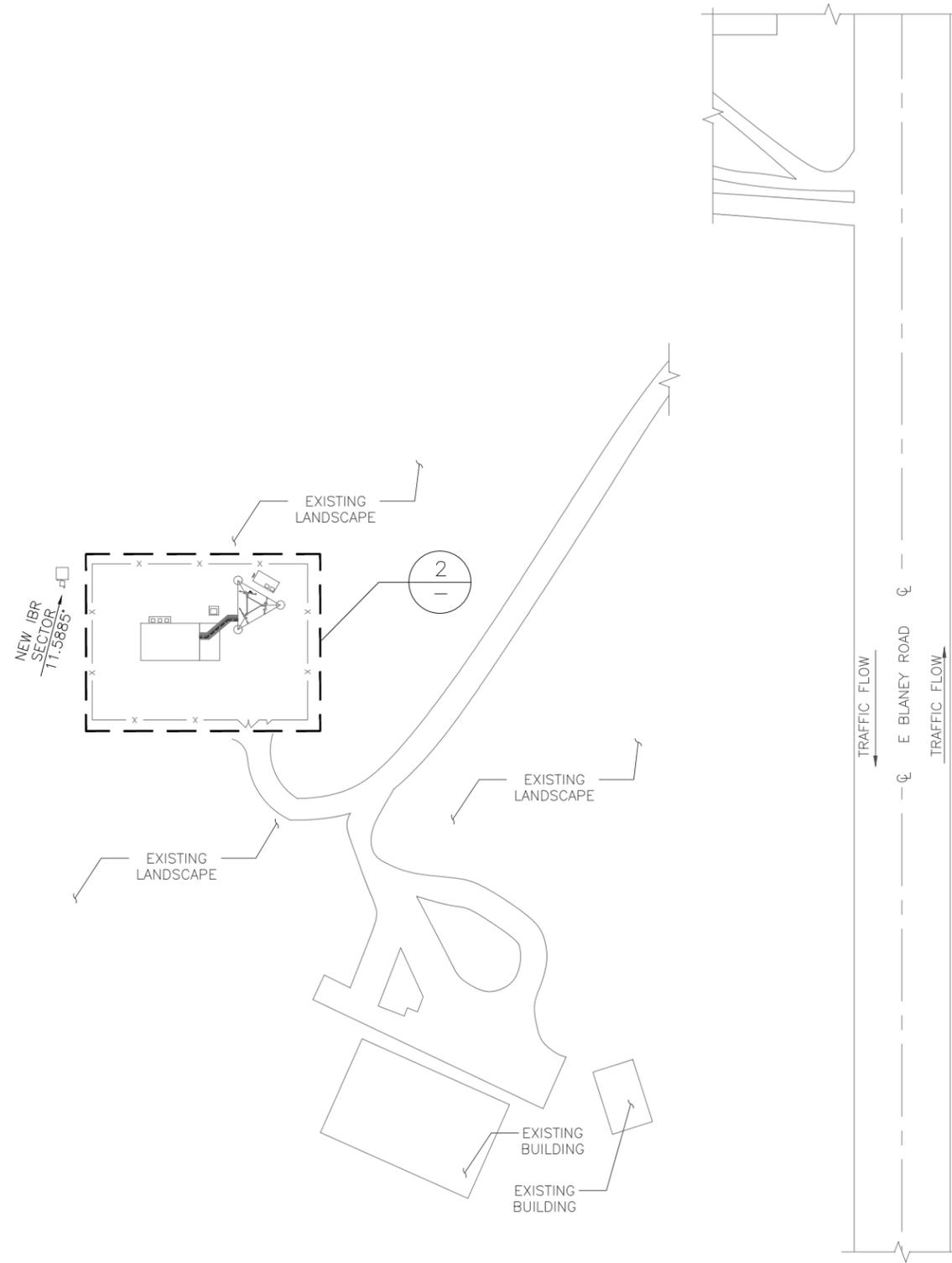
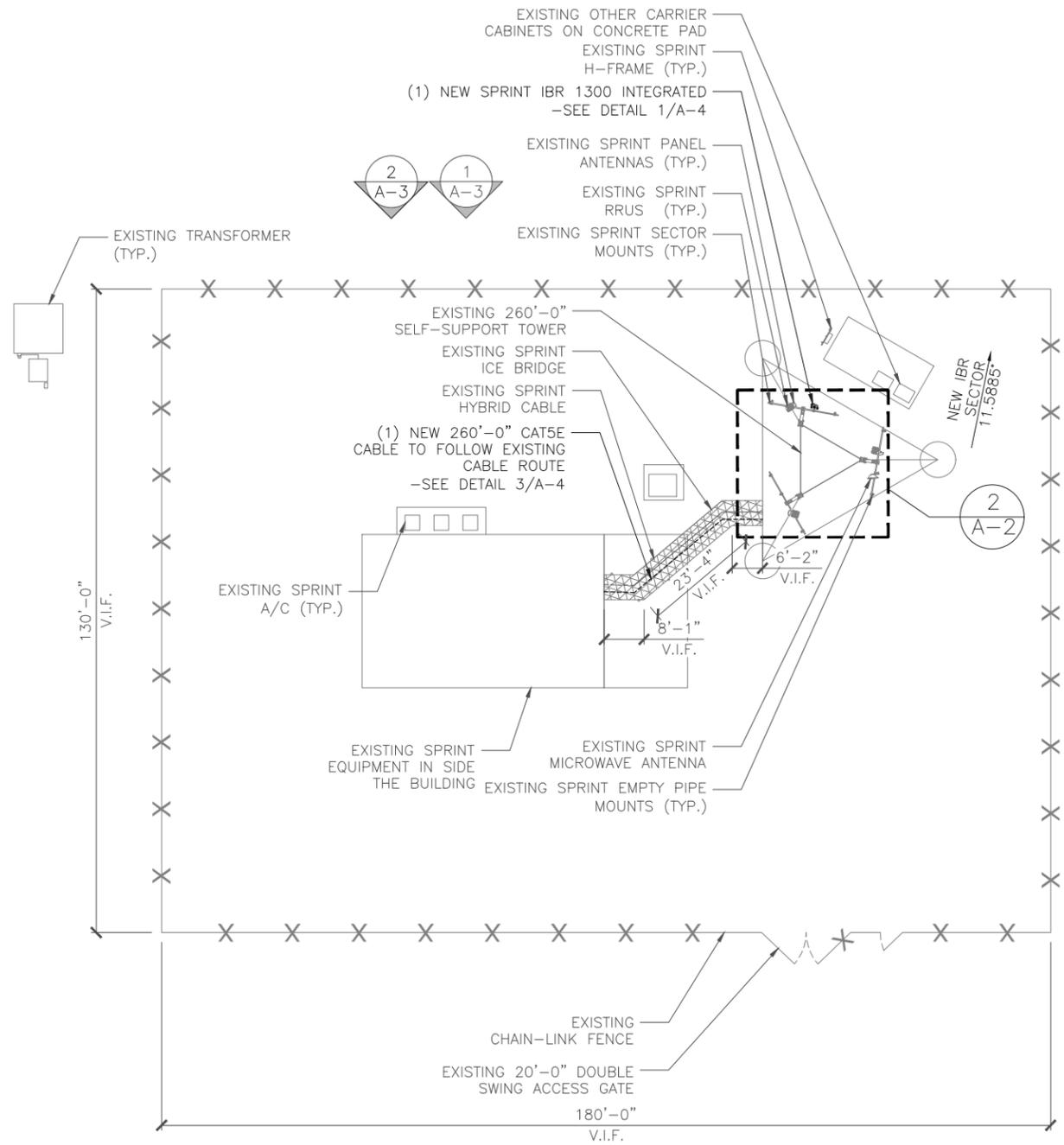
SHEET TITLE:

GENERAL NOTES,
LEGEND &
ABBREVIATIONS

SHEET NUMBER:

T-2

SCALE N.T.S. 1

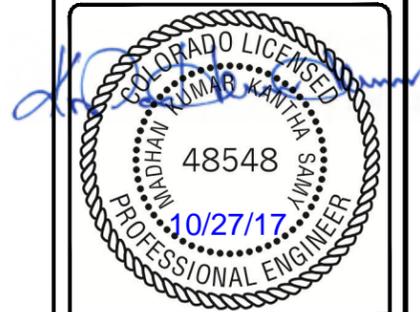


PLAN PREPARED FOR:
SOC
 WIRELESS
 A NOKIA™ COMPANY
 540 W. MADISON ST.
 17TH FLOOR
 CHICAGO, IL 60661
 WWW.SOC.COM
 312.895.4977

PLAN PREPARED BY:
LETS
LETS America, Inc.
 112 S. KYRENE RD. STE. 1
 CHANDLER, AZ 85226
 ARIZONA: 480-961-9151
 LETS PROJ. #: LETS-751-MWDO

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	10/07/17	90% CD'S	SVP
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DN72XC020
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 CO0190 - PHASE 1A
 4490 E BLANEY ROAD
 PEYTON, CO 80831

SHEET TITLE:
OVERALL & ENLARGED SITE PLANS

SHEET NUMBER:
A-1

ENLARGED SITE PLAN

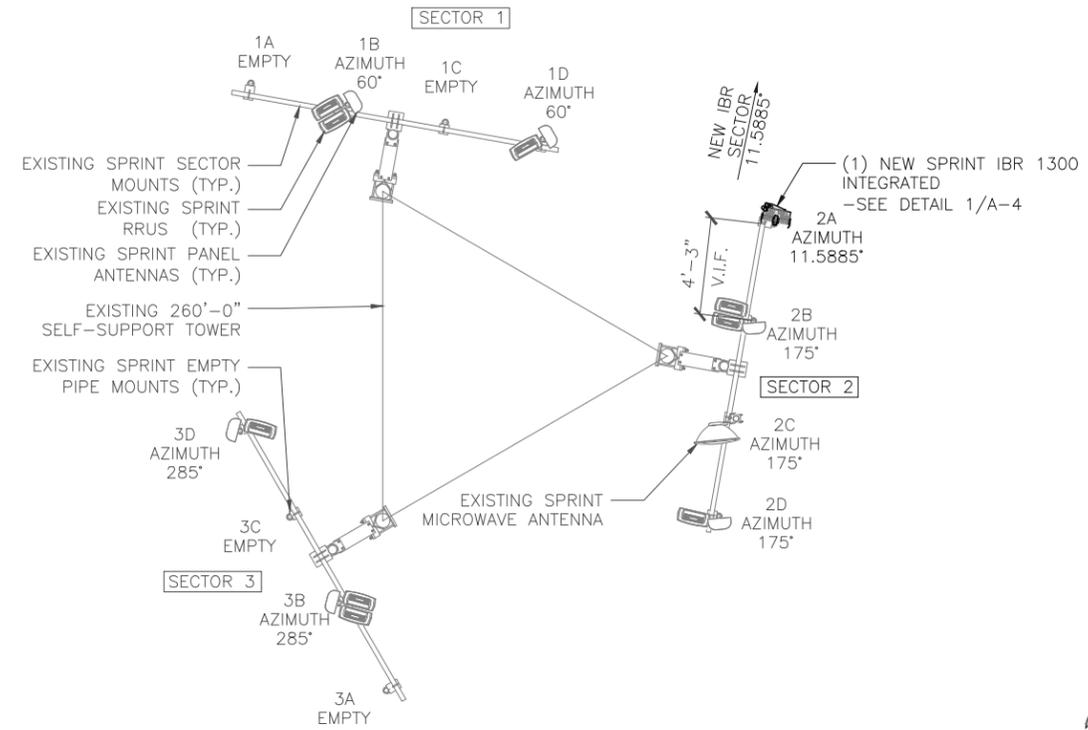
0 4' 8' 16' SCALE: 1/16"=1'-0" (22x34)
 (OR) 1/32"=1'-0" (11x17)

OVERALL SITE PLAN

0 30' 60' SCALE: 1/64"=1'-0" (22x34)
 (OR) 1/128"=1'-0" (11x17)

NOTE:
CONTRACTOR TO SEE "FINAL" IBR DATA SHEET FOR BUILD.

NEW EQUIPMENT SCHEDULE											
SECTOR	POSITION	AZIMUTH	TYPE	ANTENNA MODEL NO.	ANTENNA SIZE	RADIO MODEL NO.	RAD CENTER	CABLE TYPE	CABLE QTY	CABLE SIZE	CABLE LENGTH +20%
1	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	D	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	A	11.5885°	FASTBACK NETWORKS	IBR INTEGRATED	12"	IBR 1300	204'-0"	CAT5E	1	N/A	±260'-0"
	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	D	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	D	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



NEW IBR SCHEDULE

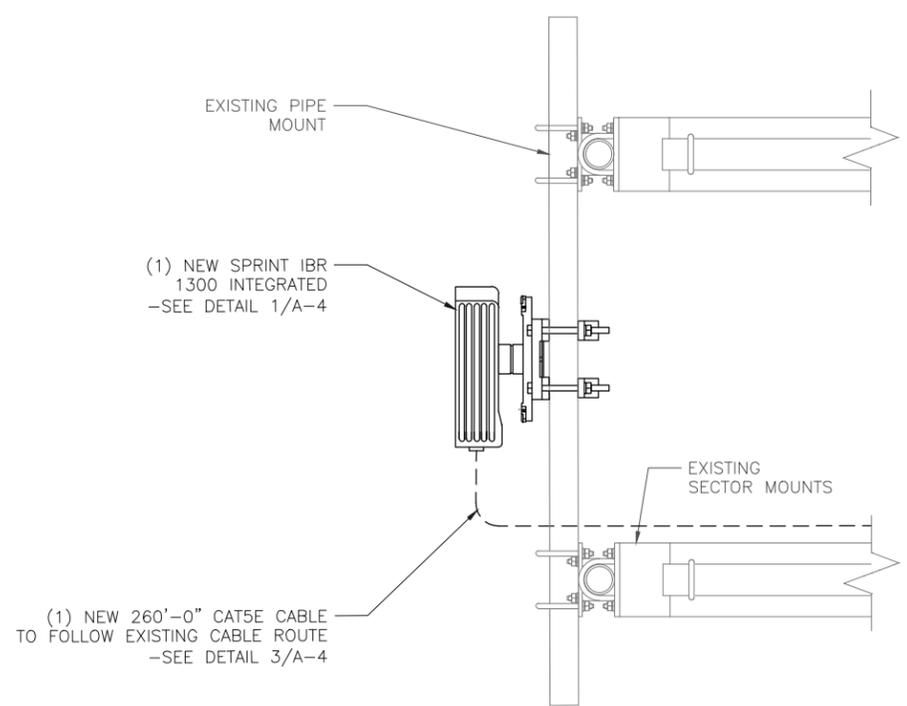
SCALE: N.T.S. 4

NEW ANTENNA PLAN @ 204'-0" RAD CENTER

SCALE: 1/4"=1'-0" (22x34) (OR) 1/8"=1'-0" (11x17) 2

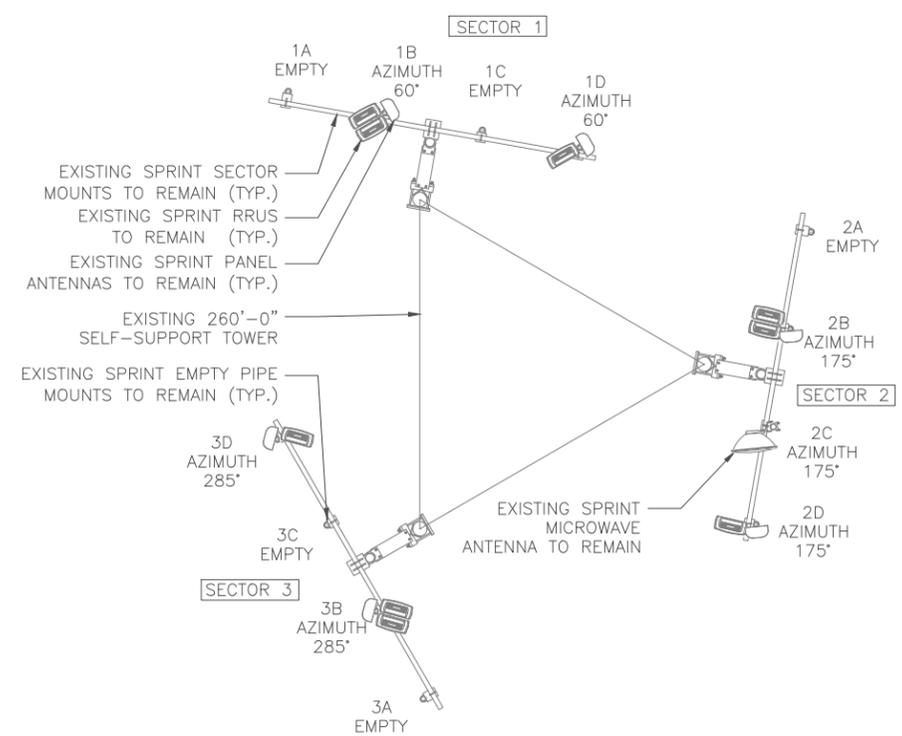
REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	10/07/17	90% CD'S	SVP
B	10/20/17	95% CD'S	SVP
0	10/27/17	100% CD'S	SVP

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



IBR 1300 INTEGRATED MOUNTING DETAIL

SCALE: 1-1/2"=1'-0" (22x34) (OR) 3/4"=1'-0" (11x17) 3



EXISTING ANTENNA PLAN @ 204'-0" RAD CENTER

SCALE: 1/4"=1'-0" (22x34) (OR) 1/8"=1'-0" (11x17) 1



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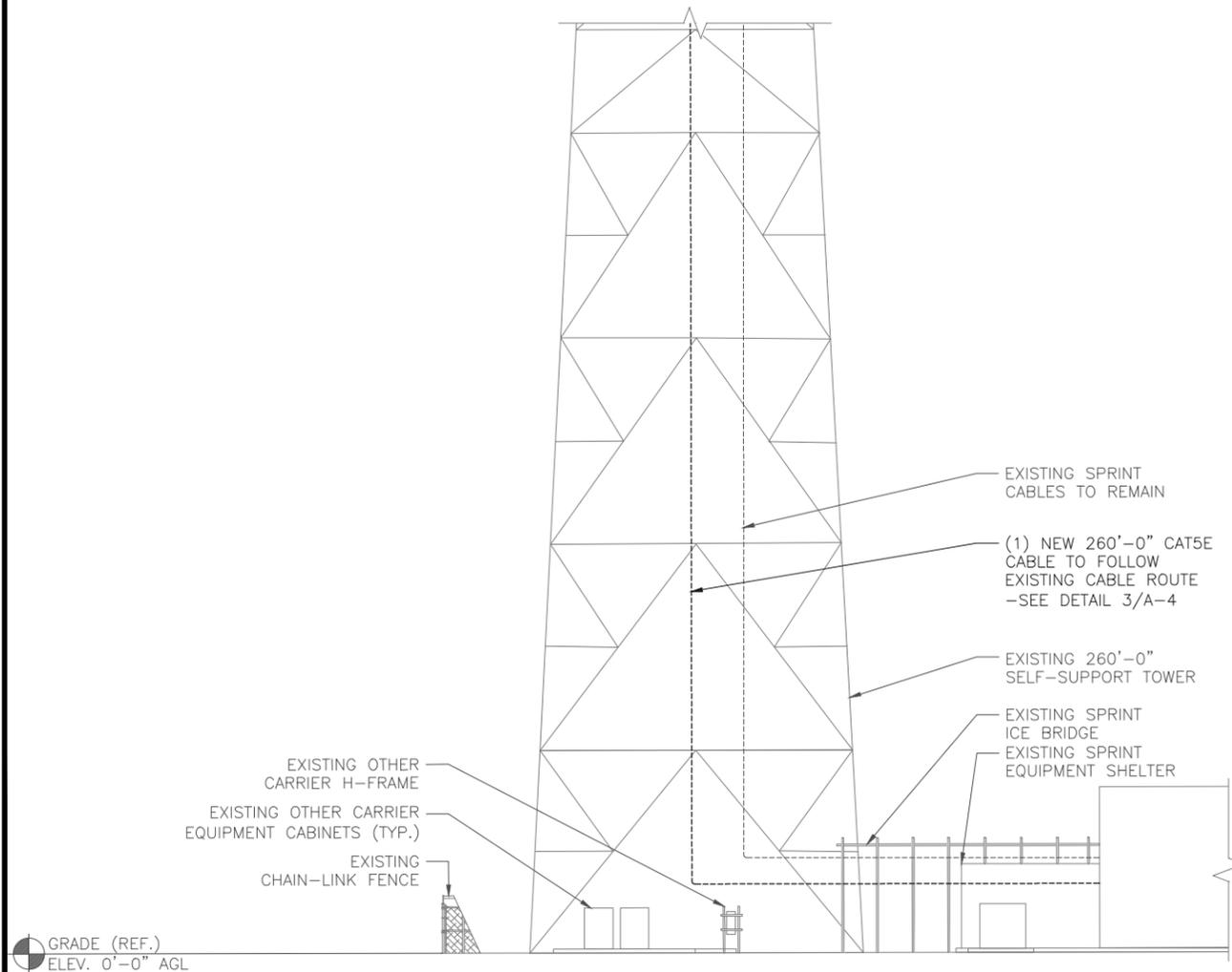
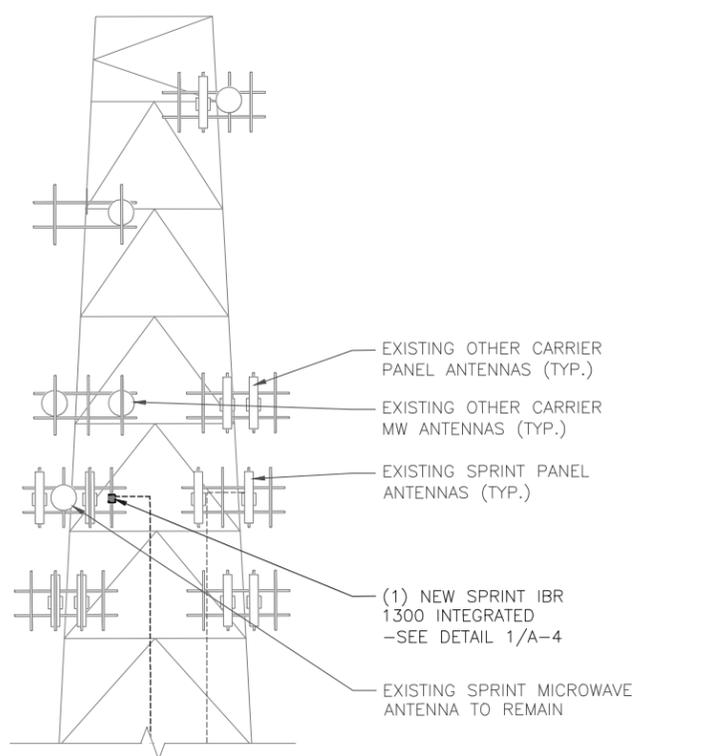
DN72XC020
DN72XC020M17.1
CO0190 - PHASE 1A
4490 E BLANEY ROAD
PEYTON, CO 80831

SHEET TITLE:
EXISTING & NEW ANTENNA LAYOUTS, MOUNTING & SCHEDULE

SHEET NUMBER:
A-2

- TOP OF TOWER
ELEV. 260'-0" AGL
- C.L. OF EXISTING OTHER CARRIER MW ANTENNA
ELEV. 250'-0" AGL
- C.L. OF EXISTING OTHER CARRIER PANEL ANTENNA
ELEV. 250'-0" AGL
- C.L. OF EXISTING OTHER CARRIER MW & OMNI ANTENNA
ELEV. 237'-0" AGL

- C.L. OF EXISTING OTHER CARRIER PANEL ANTENNA
ELEV. 215'-0" AGL
- C.L. OF EXISTING OTHER CARRIER MW ANTENNA
ELEV. 215'-0" AGL
- C.L. OF NEW SPRINT IBR 1300 INTEGRATED
ELEV. 204'-0" AGL
- C.L. OF EXISTING OTHER CARRIER PANEL ANTENNAS
ELEV. 192'-0" AGL



GRADE (REF.)
ELEV. 0'-0" AGL

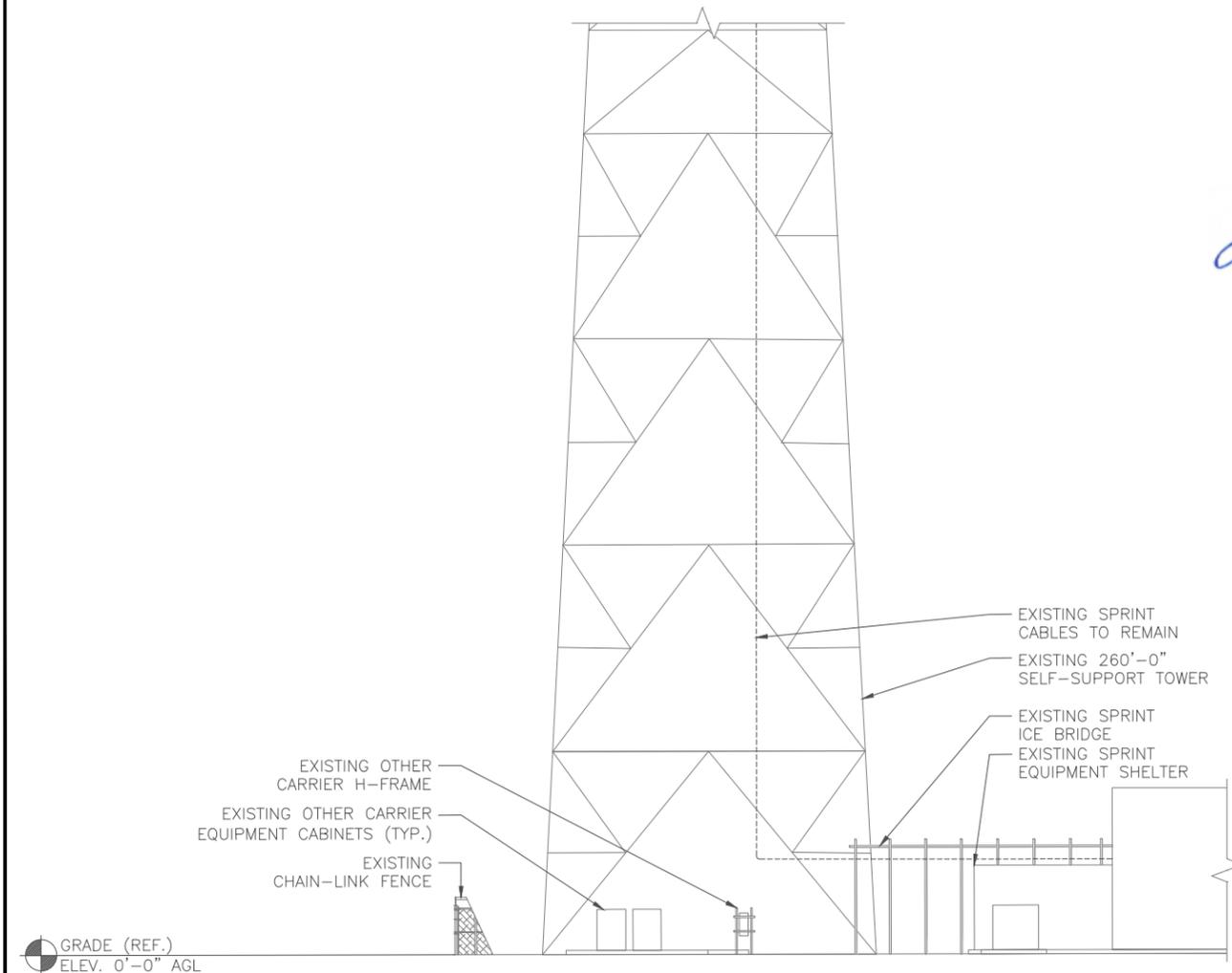
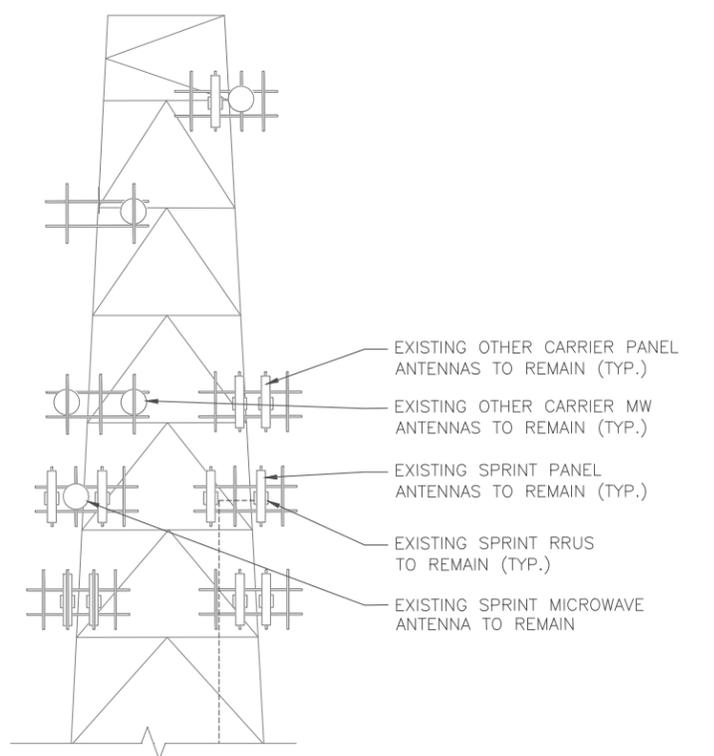
NEW ELEVATION

0 3' 6' 12' SCALE: 3/32"=1'-0" (22x34)
(OR) 3/64"=1'-0" (11x17)

2

- TOP OF TOWER
ELEV. 260'-0" AGL
- C.L. OF EXISTING OTHER CARRIER MW ANTENNA
ELEV. 250'-0" AGL
- C.L. OF EXISTING OTHER CARRIER PANEL ANTENNA
ELEV. 250'-0" AGL
- C.L. OF EXISTING OTHER CARRIER MW & OMNI ANTENNA
ELEV. 237'-0" AGL

- C.L. OF EXISTING OTHER CARRIER PANEL ANTENNA
ELEV. 215'-0" AGL
- C.L. OF EXISTING OTHER CARRIER MW ANTENNA
ELEV. 215'-0" AGL
- C.L. OF EXISTING SPRINT PANEL ANTENNAS
ELEV. 204'-0" AGL
- C.L. OF EXISTING OTHER CARRIER PANEL ANTENNAS
ELEV. 192'-0" AGL



GRADE (REF.)
ELEV. 0'-0" AGL

EXISTING ELEVATION

0 3' 6' 12' SCALE: 3/32"=1'-0" (22x34)
(OR) 3/64"=1'-0" (11x17)

1

CARRIER:

PLAN PREPARED FOR:

540 W. MADISON ST.
17TH FLOOR
CHICAGO, IL 60681
WWW.SOCW.COM
312.895.4977

PLAN PREPARED BY:

112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
LETS PROJ. #: LETS-751-MWDO

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
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B	10/20/17	95% CD'S	SVP
0	10/27/17	100% CD'S	SVP

NOT FOR CONSTRUCTION UNLESS
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DN72XC020
DN72XC020M17.1
CO0190 - PHASE 1A
4490 E BLANEY ROAD
PEYTON, CO 80831

SHEET TITLE:

**EXISTING & NEW
ELEVATIONS**

SHEET NUMBER:

A-3

FEATURES:

- CONTRACTOR IS TO REFER TO SPRINT'S MOST CURRENT RADIO FREQUENCY DATA SHEET (RFDS) PRIOR TO CONSTRUCTION.
- CABLE LENGTHS WERE DETERMINED BASED ON THE DESIGN DRAWING. CONTRACTOR TO VERIFY ACTUAL LENGTH DURING PRE-CONSTRUCTION WALK.
- CONTRACTOR TO USE ROSENBERGER FIBER LINE HANGER COMPONENTS (OR ENGINEER APPROVED EQUAL).

GENERAL COLOR CODING NOTES:

- THE ANTENNA SYSTEM COAX SHALL BE LABELED WITH VINYL TAPE.
- THE STANDARD IS BASED ON EIGHT COLORED TAPES-RED, BLUE, GREEN, YELLOW, ORANGE, BROWN, WHITE AND VIOLET. THESE TAPES MUST BE 3/4" WIDE & UV RESISTANT SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE AND SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR CONTRACTOR ON SITE.
- USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLE BY SECTOR AND CABLE NUMBER AS SHOWN ON "CABLE COLOR CHART".
- WHEN AN EXISTING COAXIAL LINE THAT IS INTENDED TO BE A SHARED LINE BETWEEN TECHNOLOGIES IS ENCOUNTERED, THE CONTRACTOR SHALL REMOVE THE EXISTING COLOR CODING SCHEME AND REPLACE IT WITH THE COLOR CODING STANDARD. IN THE ABSENCE OF AN EXISTING COLOR CODING AND TAGGING SCHEME, OR WHEN INSTALLING PROPOSED COAXIAL CABLES, THIS GUIDELINE SHALL BE IMPLEMENTED AT THAT SITE REGARDLESS OF TECHNOLOGY.
- ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) THREE WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING.
- ALL COLOR BANDS INSTALLED AT THE TOP OF THE TOWER SHALL BE A MINIMUM OF 3" WIDE, AND SHALL HAVE A MINIMUM OF 3/4" OF SPACE BETWEEN EACH COLOR.
- ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE-TO-SIDE.
- IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE NEW TECHNOLOGY, THE EXISTING COLOR CODING SCHEME SHALL REMAIN UNTOUCHED.

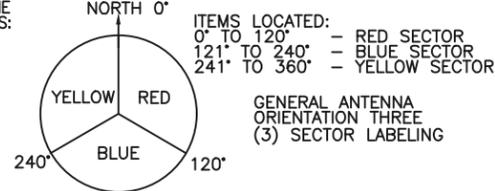
SECTOR DEGREE RANGE	MARKING METHOD COLORED BANDS	MARKING METHOD NUMBER OF BANDS
0° TO 120°	RED	SMALLEST # IN THIS RANGE = R1 NEXT LARGER # = R2
121° TO 240°	BLUE	SMALLEST # IN THIS RANGE = B1 NEXT LARGER # = B2
241° TO 360°	YELLOW	SMALLEST # IN THIS RANGE = Y1 NEXT LARGER # = Y2

NOTES:

LABEL EACH ANTENNA ABOVE THE DOWN-TILT KNOB AND ON THE DOWN-TILT OUTER CAP WITH COLORED TAPE, LABEL AS FOLLOWS:
RED: RFU_1 BLUE: RFU_2 YELLOW: RFU_3

ETHERNET CABLES SHALL BE PLACED INSIDE INNER DUCT AND ATTACHED TO THE TOWER.

FIGURE 3: SPRINT SECTOR DIAGRAM



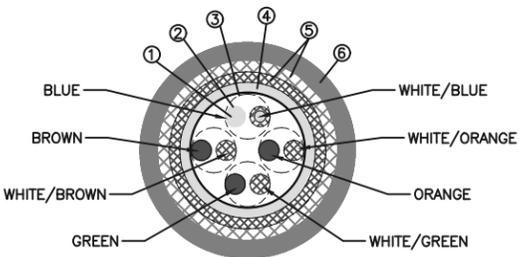
- NOTE*: ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) WRAPS OF TAPE.
- NOTE*: ALL COLOR BANDS INSTALLED AT THE TOWER TOP SHALL BE A MINIMUM OF 3" WIDE AND SHALL HAVE A MINIMUM OF 3/4" OF SPACING BETWEEN EACH COLOR.
- NOTE*: ALL COLOR BANDS INSTALLED AT OR NEAR THE GROUND MAY BE ONLY 3/4" WIDE. EACH TOP-JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" SIDE BANDS.
- NOTE*: EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" BANDS NEAR THE TOP-JUMPER CONNECTION AND WITH 3/4" COLOR BANDS JUST PRIOR TO ENTERING BTS OR TRANSMITTER BUILDING.
- NOTE*: ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" BANDS ON EACH END OF THE BOTTOM JUMPER.
- NOTE*: ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE-TO-SIDE.
- NOTE*: EACH COLOR BAND SHALL HAVE A MINIMUM OF (3) WRAPS AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING.
- NOTE*: X-POLE ANTENNAS SHOULD USE "XX-1" FOR THE "+45" PORT, "XX-2" FOR THE "-45" PORT.
- NOTE*: COLORBAND #4 REFERS TO THE FREQUENCY BAND: ORANGE=850, VIOLET=1900. USED ON JUMPERS ONLY.
- NOTE*: RF FEEDLINE SHALL BE IDENTIFIED WITH A METAL TAG (STAINLESS OR BRASS) AND STAMPED WITH THE SECTOR, ANTENNA POSITION, AND CABLE NUMBER.
- NOTE*: ANTENNAS MUST BE IDENTIFIED, USING THE SECTOR LETTER AND ANTENNA NUMBER, WITH A BLACK MARKER PRIOR TO INSTALLATION.

TAPE	TAG	CABLE MARKING LOCATIONS TABLE
X		EACH TOP-JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS.
X		EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP-JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING.
	X	MARKING TAGS SHALL BE ATTACHED AT CABLE ENTRY PORT ON THE INTERIOR OF THE SHELTER
X		ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF BOTTOM JUMPER.

CABLE MARKING TAGS

TO PROVIDE ADDITIONAL IDENTIFICATION RF CABLES SHALL BE IDENTIFIED WITH A METAL TAG MADE OF STAINLESS STEEL OR BRASS AND STAMPED WITH A SECTOR, ANTENNA POSITION, AND CABLE NUMBER. THE ID MARKING LOCATIONS SHOULD BE AS PER "CABLE MARKING LOCATIONS TABLE." THE TAG SHOULD BE ATTACHED WITH CORROSIVE-PROOF WIRE OR WAX STRING AROUND THE CABLE. THE TAG SHOULD BE LABELED AS SHOWN BELOW IN FIGURE 2.

FIGURE 2: TAG DETAIL EXAMPLE



CABLE CONSTRUCTION:

- CONDUCTOR DIAMETER: $\phi 0.500M$
- INSULATION : $\phi PE < 0.95mm$
- CABLE ASSEMBLY: NUMBER OF PAIRS (4)
- PROTECTION: SYNTHETIC WATER-REPELLENT TAPE
- GENERAL SHIELDING: ALU/POLYESTER TAPE + COPPER BRAID (80%)
- SHEATH MATERIAL: LSOH UV STABILIZE

COLOR CODE:

- BLUE + WHITE/BLUE
- ORANGE + WHITE/ORANGE
- GREEN + WHITE/GREEN
- BROWN + WHITE/BROWN

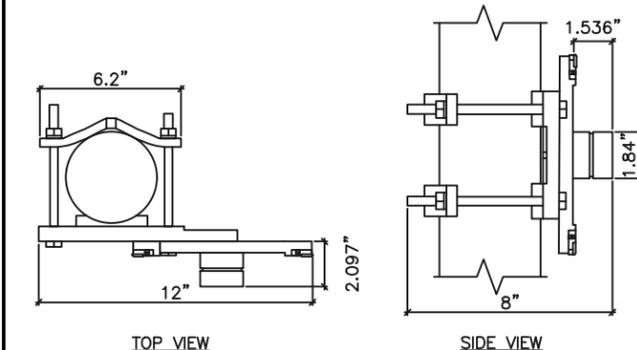
NOT USED

SCALE N.T.S. 6

CAT5E CABLE

SCALE N.T.S. 3

MANUFACTURE: TRANGO SYSTEMS: HP-MNT-XX



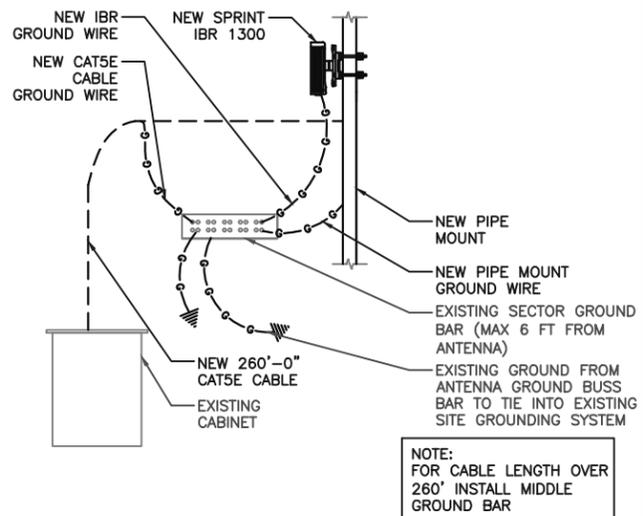
NOTE:
MODEL TO BE APPROVED BY SPRINT.

NOT USED

SCALE N.T.S. 5

IBR 1300 INTEGRATED MOUNTING DETAIL

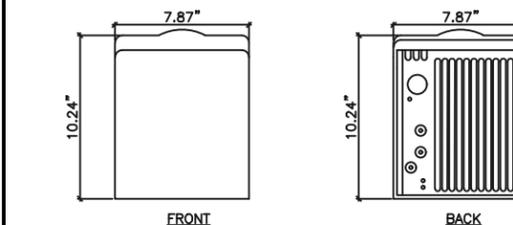
SCALE N.T.S. 2



IBR 1300 INTEGRATED INTELLIGENT BACKHAUL RADIO

- RADIO:**
- BASE CAPACITY-VARIABLE FROM 10MBPS TO 2 GBPS FULL DUPLEX OR 2X CAPACITY UP TO 4 GBPS WITH DPRM
 - CAPACITY W/ACCELERATOR-BANDWIDTH + DELIVERING UP TO 2X INCREASE IN BASE THROUGHOUT
 - LATENCY GIGE-<120us @ 2048QAM,50 MHZ
 - MODULATIONS-QPSK TO 4096QAM
 - CHANNEL BANDWIDTH-28/30/40/50/56/80/100/112 MHZ
- DIMENSIONS (IBR):**
- 10.24"x7.87"x3.54"
 - 8.82 lbs (4kg)

- SWITCH:**
- Y.1731 AND 802.1AG OAM, Q IN Q, RFC 2544 REFLECTION,
 - FLOW CONTROL-COLOR AWARE CONGESTION AVOIDANCE (WRED)
 - PRIORITIZATION-8 LEVELS SERVED BY 8 HARDWARE QUEUES, BASED ON 802.1p/q,MPLS,DSCP
 - ETHERNET SERVICES-ELINE/ELAN
- OPERATING TEMPERATURES**
- 40°C TO +60°C (-40°F TO + 140°F)
- POWER SUPPLY:**
- INPUT: POE
- REFER TO DATA SHEET FOR FULL SPECS.



COLOR CODING

SCALE N.T.S. 7

SINGLE LINE DIAGRAM

SCALE N.T.S. 4

IBR 1300 INTEGRATED

SCALE N.T.S. 1

CARRIER:



PLAN PREPARED FOR:



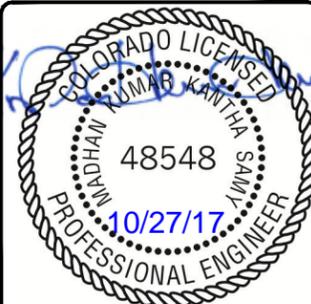
PLAN PREPARED BY:



REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	10/07/17	90% CD'S	SVP
B	10/20/17	95% CD'S	SVP
O	10/27/17	100% CD'S	SVP

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DN72XC020
DN72XC020M17.1
CO0190 - PHASE 1A
4490 E BLANEY ROAD
PEYTON, CO 80831

SHEET TITLE:

EQUIPMENT
DETAILS & SINGLE
LINE DIAGRAM

SHEET NUMBER:

A-4

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	COPPER GROUND ROD		TEST WELL
	MECHANICAL CONNECTION		GROUND BAR
	CADWELD CONNECTION		
	FIELD VERIFY & TIE INTO EXISTING GROUNDING SYSTEM		

GROUNDING LEGEND

SCALE: 8
N.T.S.

- ANTENNA GROUND BUS BAR NEAR ANTENNA MOUNTS WITH COAX GROUND KIT.
- EQUIPMENT GROUND BUS BAR NEAR EQUIPMENT WITH COAX GROUND KIT.
- #6 AWG GROUND FROM ANTENNA GROUND BUS BAR TO TIE INTO EXISTING GROUNDING SYSTEM (TYP OF (2) PLACES).
- #6 AWG GROUND FROM ANTENNAS TO ANTENNA GROUND BUS BAR.
- #6 AWG GROUND FROM RADIOS TO ANTENNA GROUND BUS BAR.
- #6 AWG GROUND MMBTS GROWTH CABINET TO NEW EQUIPMENT GROUND BUSS BAR.
- #6 AWG GROUND FROM NEW GROUND BUS BAR TO TIE INTO EXISTING GROUNDING SYSTEM (TYP OF (2) PLACES).
- GROUND FROM CABINETS TO NEW EQUIPMENT GROUND BUS BAR.

GROUNDING KEY

SCALE: 7
N.T.S.

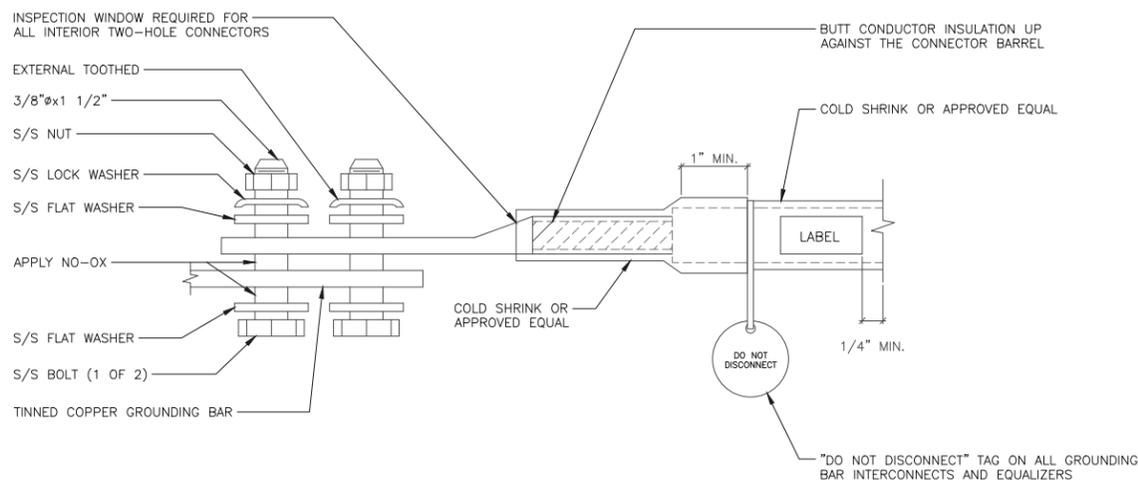
- ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
- GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURES PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELDS AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.
- ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
- CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY AN SPRINT REPRESENTATIVE.
- REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS.
- CONTRACTOR TO ABIDE BY ALL SPRINT SAFETY STANDARDS DURING SITE CONSTRUCTION.
- CONTRACTOR SHALL REFER TO SPRINT STANDARDS FOR GROUNDING CONNECTIONS & INSTALLATION METHODS.
- ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED SPRINT REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CADWELDS AND GROUND RING.
- NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
- GROUNDING ROD NOTES (WHERE APPLICABLE)
- ELECTRICAL CONTRACTOR SHALL ORDER GROUND RESISTANCE TESTING ONCE THE GROUND SYSTEM HAS BEEN INSTALLED; A QUALIFIED INDIVIDUAL UTILIZING THE FALL OF POTENTIAL METHOD, SHOULD PERFORM THE TEST. THE REPORT WILL SHOW THE LOCATION OF THE TEST AND CONTAIN NO LESS THAN 9 TEST POINTS ALONG THE TESTING LINE, GRAPHED OUT TO SHOW THE PLATEAU!
- POINT GROUND TEST OR 3 POINT 62% TESTS WILL NOT BE ACCEPTED AS ALTERNATIVES TO THE AFORE MENTIONED GROUND TESTS. TEST SHALL BE PERFORMED WHILE THE COUNTERPOISE IS ISOLATED. TEST SHALL BE PERFORMED WHILE THE COUNTERPOISE IS ISOLATED FROM THE A/C SYSTEM GRIDS AND EXISTING COMMUNICATIONS FACILITY.

GENERAL GROUNDING NOTES

SCALE: 6
N.T.S.

SCHEMATIC ANTENNA GROUNDING PLAN

SCALE: 5
N.T.S.

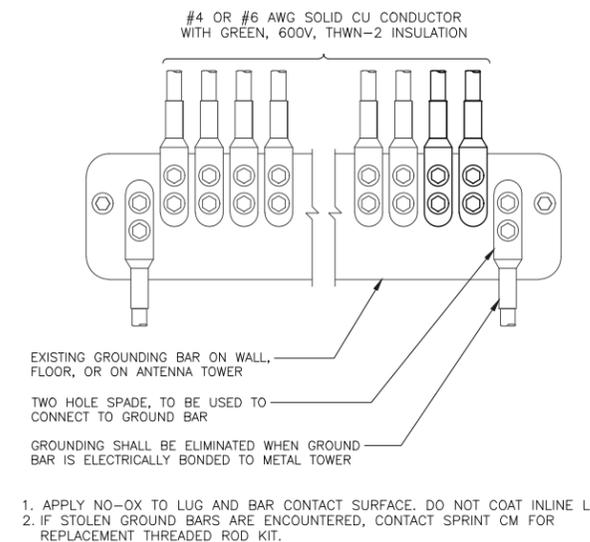


TWO HOLE LUG CONNECTION

SCALE: 4
N.T.S.

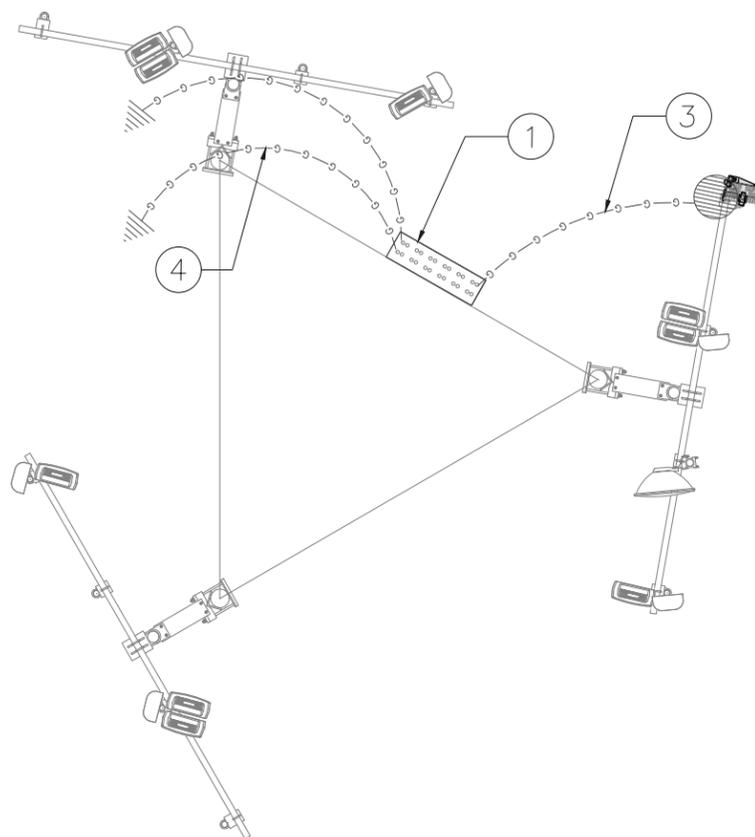
EXOTHERMIC WELD CONNECTIONS

SCALE: 2
N.T.S.



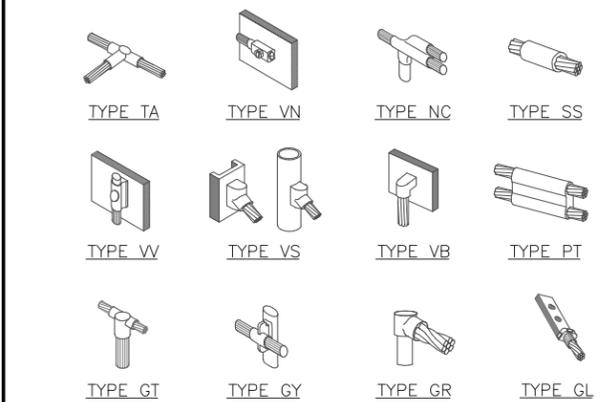
GROUND WIRE INSTALLATION

SCALE: 1
N.T.S.



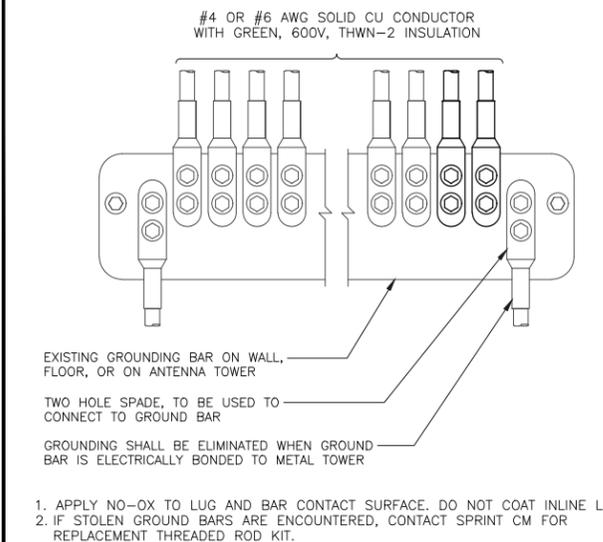
GROUND CABLE CONNECTION

SCALE: 3
N.T.S.



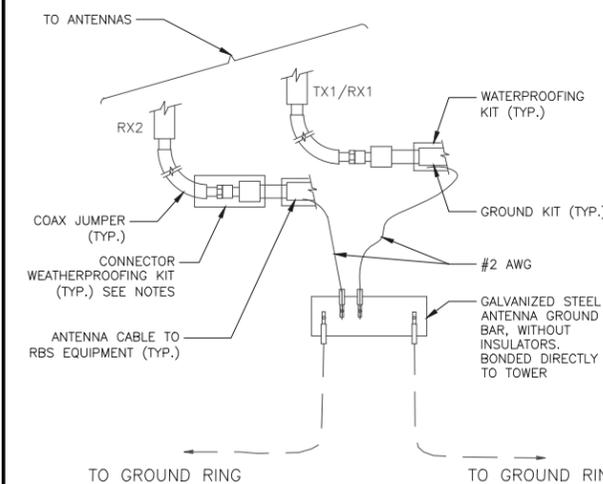
EXOTHERMIC WELD CONNECTIONS

SCALE: 2
N.T.S.



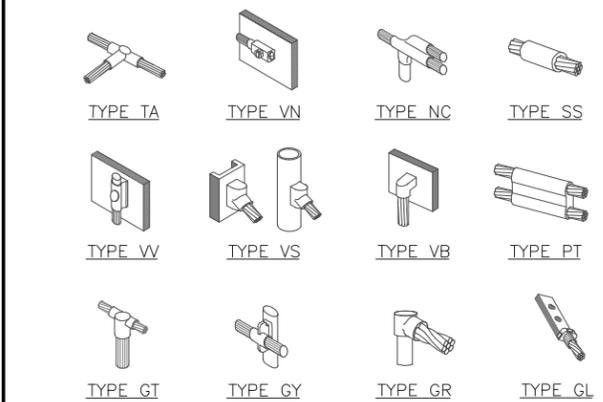
GROUND WIRE INSTALLATION

SCALE: 1
N.T.S.



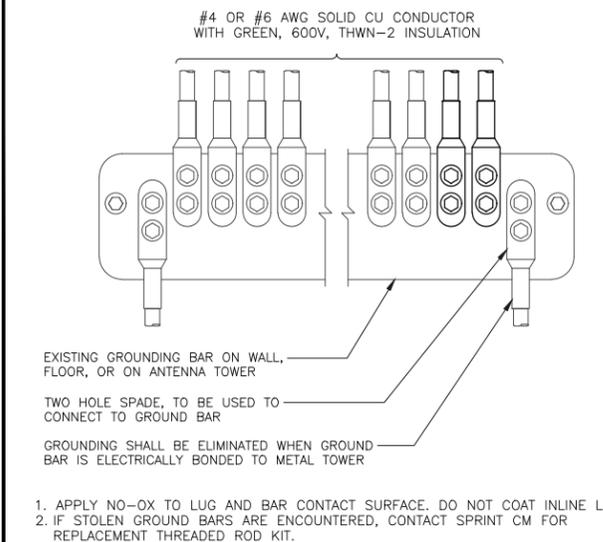
GROUND CABLE CONNECTION

SCALE: 3
N.T.S.



EXOTHERMIC WELD CONNECTIONS

SCALE: 2
N.T.S.



GROUND WIRE INSTALLATION

SCALE: 1
N.T.S.

CARRIER:



PLAN PREPARED FOR:

SOC WIRELESS A NOKIA COMPANY
540 W. MADISON ST. 17TH FLOOR CHICAGO, IL 60661 WWW.SOCW.COM 312.895.4977

PLAN PREPARED BY:

LETS
LETS America, Inc.
112 S. KYRENE RD. STE. 1 CHANDLER, AZ 85226 ARIZONA: 480-961-9151 LETS PROJ. #: LETS-751-MWDO

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	10/07/17	90% CD'S	SVP
B	10/20/17	95% CD'S	SVP
0	10/27/17	100% CD'S	SVP

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF COLORADO"

DN72XC020
DN72XC020M17.1
CO0190 - PHASE 1A
4490 E BLANEY ROAD
PEYTON, CO 80831

SHEET TITLE:

SCHEMATIC GROUND PLAN & DETAILS

SHEET NUMBER:

G-1