# CRAN ID / EXTENET ID: CRAN\_RCTB\_2HA4\_092B/NE-MA-BSTBSC01-00092BB

LATITUDE / LONGITUDE: 42.35568726° / -71.06930476°

SITE ADDRESS: **CHARLES ST** 

CITY, STATE, ZIP: BOSTON, MA 02108

#### NOTE:

GENERAL CONTRACTOR IS REQUIRED TO CROSS CHECK COORDINATES. EXHIBIT PHOTO. AERIAL PHOTO AND SITE PLAN TO ENSURE PROPER POLE LOCATION PRIOR TO BREAKING GROUND, CONCERNS OR QUESTIONS SHOULD BE IMMEDIATELY DIRECTED TO ASSIGNED EXTENET PROJECT MANAGER.

## **GENERAL NOTES**

**CALL BEFORE YOU DIG** 

**ENTER 1-888-DIG-SAFE** 

UNDERGROUND SERVICE ALERT

72 HOURS NOTICE REQUIRED.

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION, A TECHNICHIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE.

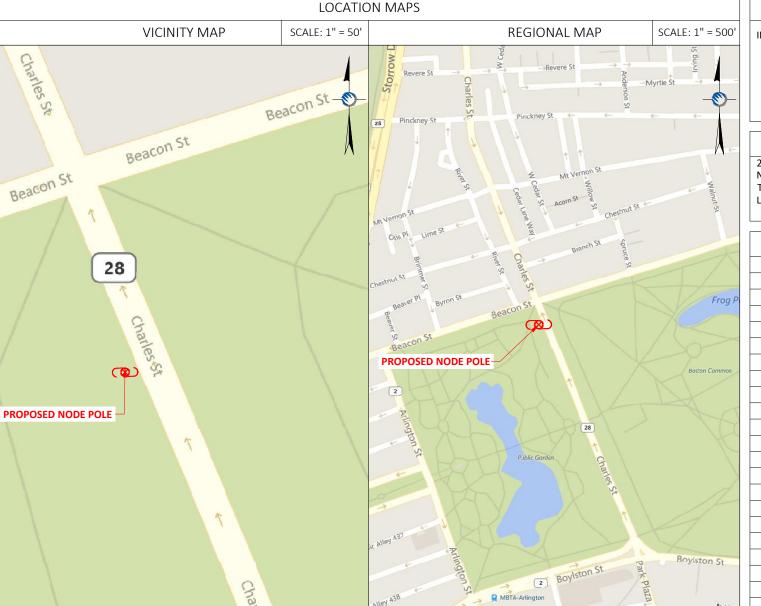
SIT	E INFORMATION	
CRAN ID:	CRAN_RCTB_2HA4_092B	
EXTENET NODE ID:	NE-MA-BSTBSC01-00092B	
LATITUDE:	42.35568726°	
LONGITUDE:	-71.06930476°	
SITE ADDRESS:	CHARLES ST	
CITY, STATE ZIP:	BOSTON, MA 02108	
COUNTY:	SUFFOLK	
JURISDICTION:	BOSTON	
PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY	
APPLICANT:	EXTENET SYSTEMS 876 HAMMOND ST CHESTNUT HILL, MA 02467 (617) 232-4154	

## **ENGINEER**

RICK ANGELINI 3030 WARRENVILLE RD SUITE 340 LISLE, IL 60532 NOC: (866) 892-5327

## DO NOT SCALE DRAWINGS

CONTRACTORS SHALL VERIFY ALL PLANS, (EX.) DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT / ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



**Location and Design Approved Boston Public Works Street Lighting Department** 

Date:

### PROJECT DESCRIPTION

#### INVOLVING INSTALLMENT:

THESE PLANS REPRESENT A PORTION OF A PROPOSED SMALL CELL BUILD INVOLVING THE INSTALLMENT OF AN ANTENNA AND RADIO EQUIPMENT ON AN EXISTING WOODEN UTILITY OR REPLACEMENT METAL STREETLIGHT POLE.

## **CODES**

2019 INTERNATIONAL BUILDING CODE NATIONAL ELECTRIC SAFETY CODE TIA/EIA-222-G-2 OR LATEST EDITION LOCAL BUILDING / PLANNING CODE

DRAWING INDEX				
SHEET NO:	SHEET TITLE			
T-1	TITLE SHEET			
A-1	SITE PLAN & EXHIBIT PHOTO			
A-2	ELEVATIONS			
A-3	ELEVATIONS			
D-1	ANTENNA DETAILS			
D-2	RADIO SHROUD DETAILS			
D-3	FOUNDATION DETAILS			
D-4	GROUNDING & WIRING DIAGRAMS			
GN-1	GENERAL NOTES			
GN-2	GENERAL NOTES			



UC/SYNERGETIC MANSFIELD, MA 02048

**CHARLES ST BOSTON, MA 02108** SUFFOLK COUNTY

P.E. STAMP AREA:

DRAWING NOTES:

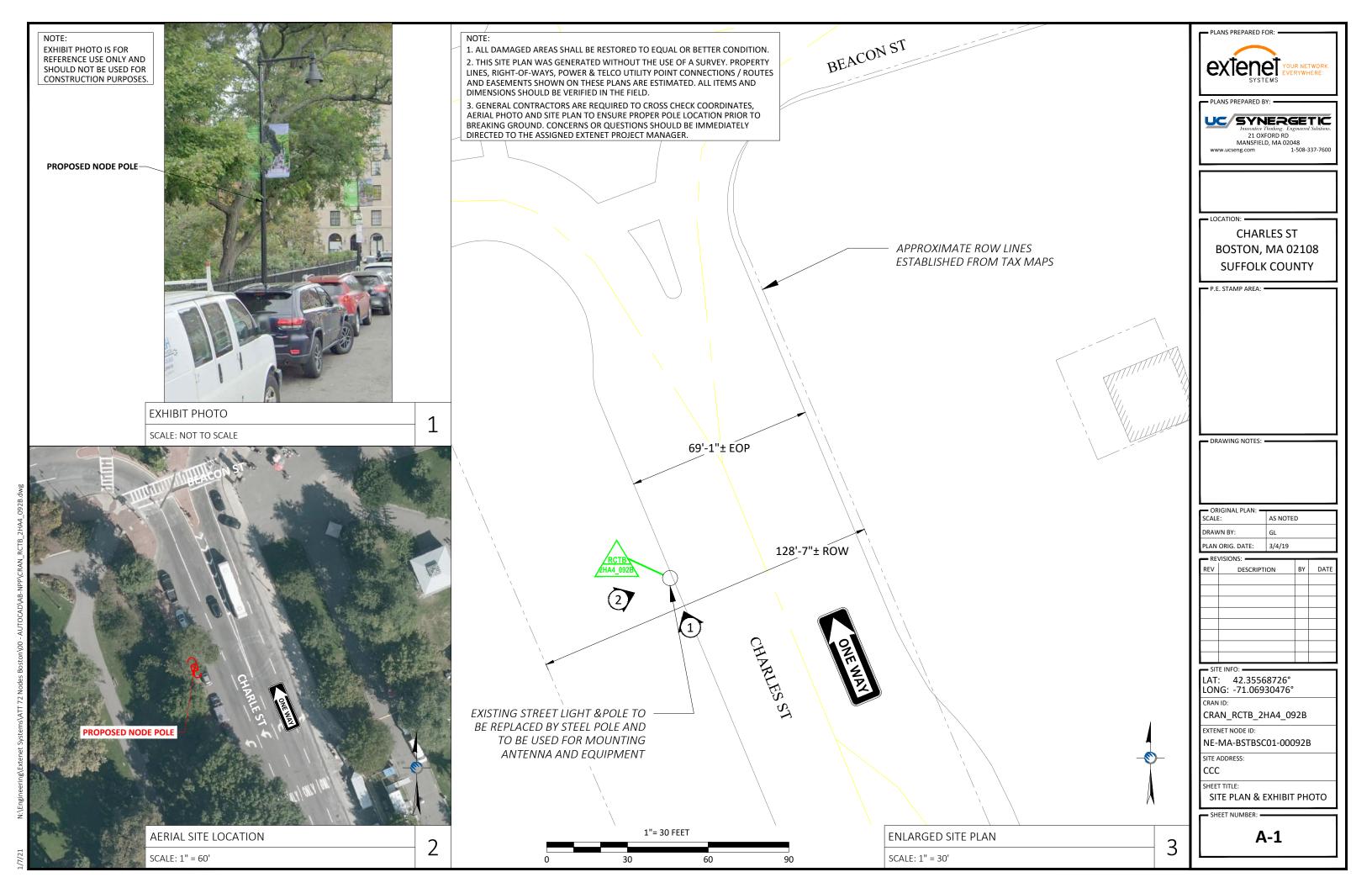
AS NOTED RAWN BY PLAN ORIG. DATE: 3/4/19

REVISIONS:					
REV	DESCRIPTION	BY	DATE		

LAT: 42.35568726° LONG: -71.06930476° CRAN ID: CRAN RCTB 2HA4 092B EXTENET NODE ID: NE-MA-BSTBSC01-00092B SITE ADDRESS: CCC SHEET TITLE: TITLE SHEET

SHEET NUMBER:

**T-1** 



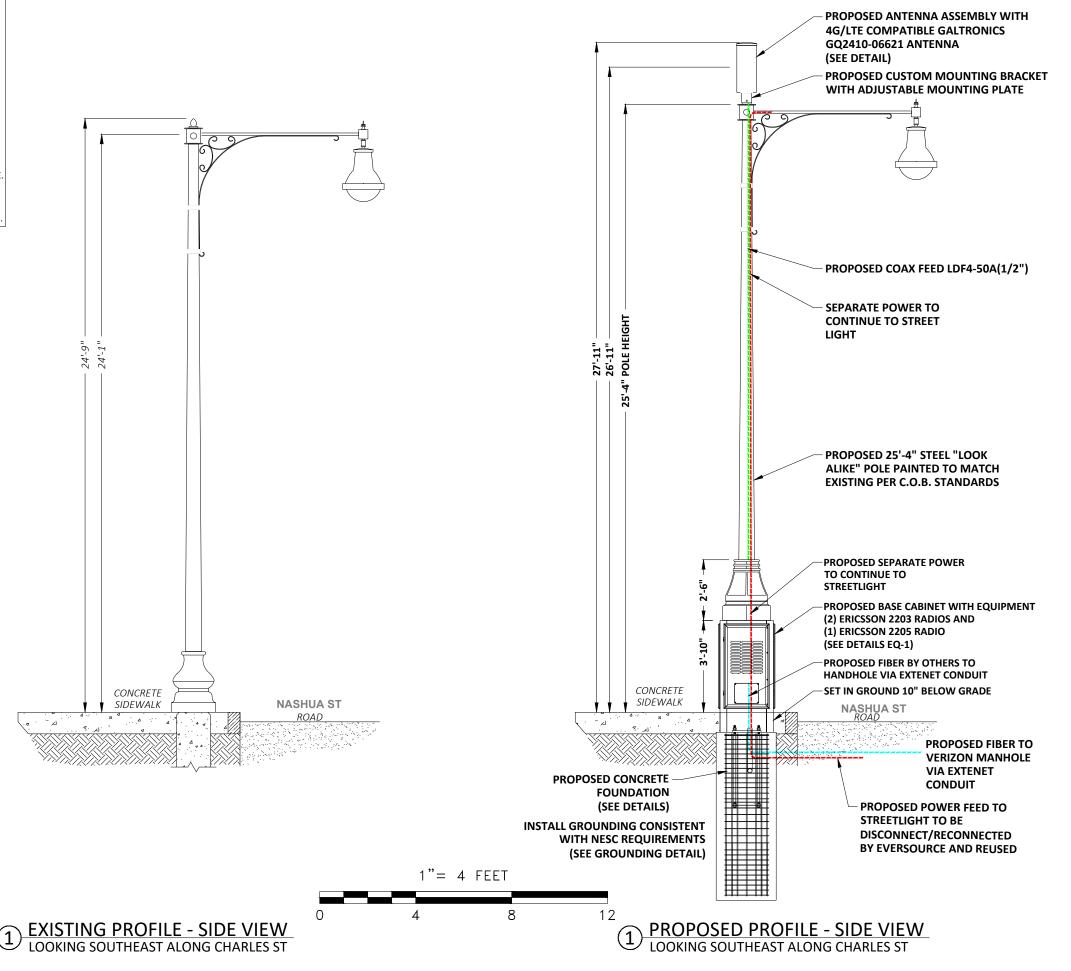
NOTE 1: 40" MIN. WORKER SAFETY ZONE BETWEEN LOWEST POWER & HIGHEST **COMMUNICATIONS CABLE** IN ACCORDANCE WITH NESC REGULATIONS.

PROPOSED FIBER TO BE INSTALLED BY OTHERS.

PROPOSED EQUIPMENT TO BE PAINTED TO BLEND WITH POLE.

FCC MANDATED SIGNAGE TO BE ATTACHED TO POLE.

PROPOSED EQUIPMENT SHALL BE INSTALLED NO HIGHER THAN 30" BELOW TELEPHONE UTILITY LINES.





PLANS PREPARED BY:



**CHARLES ST** BOSTON, MA 02108 SUFFOLK COUNTY

P.E. STAMP AREA:

DRAWING NOTES:

AS NOTED DRAWN BY: PLAN ORIG. DATE: 3/4/19

REVISIONS:					
REV	ı	DV/	DATE		
KEV	DESCRIPTION	BY	DATE		

LAT: 42.35568726° LONG: -71.06930476° CRAN ID:

CRAN\_RCTB\_2HA4\_092B

EXTENET NODE ID:

NE-MA-BSTBSC01-00092B

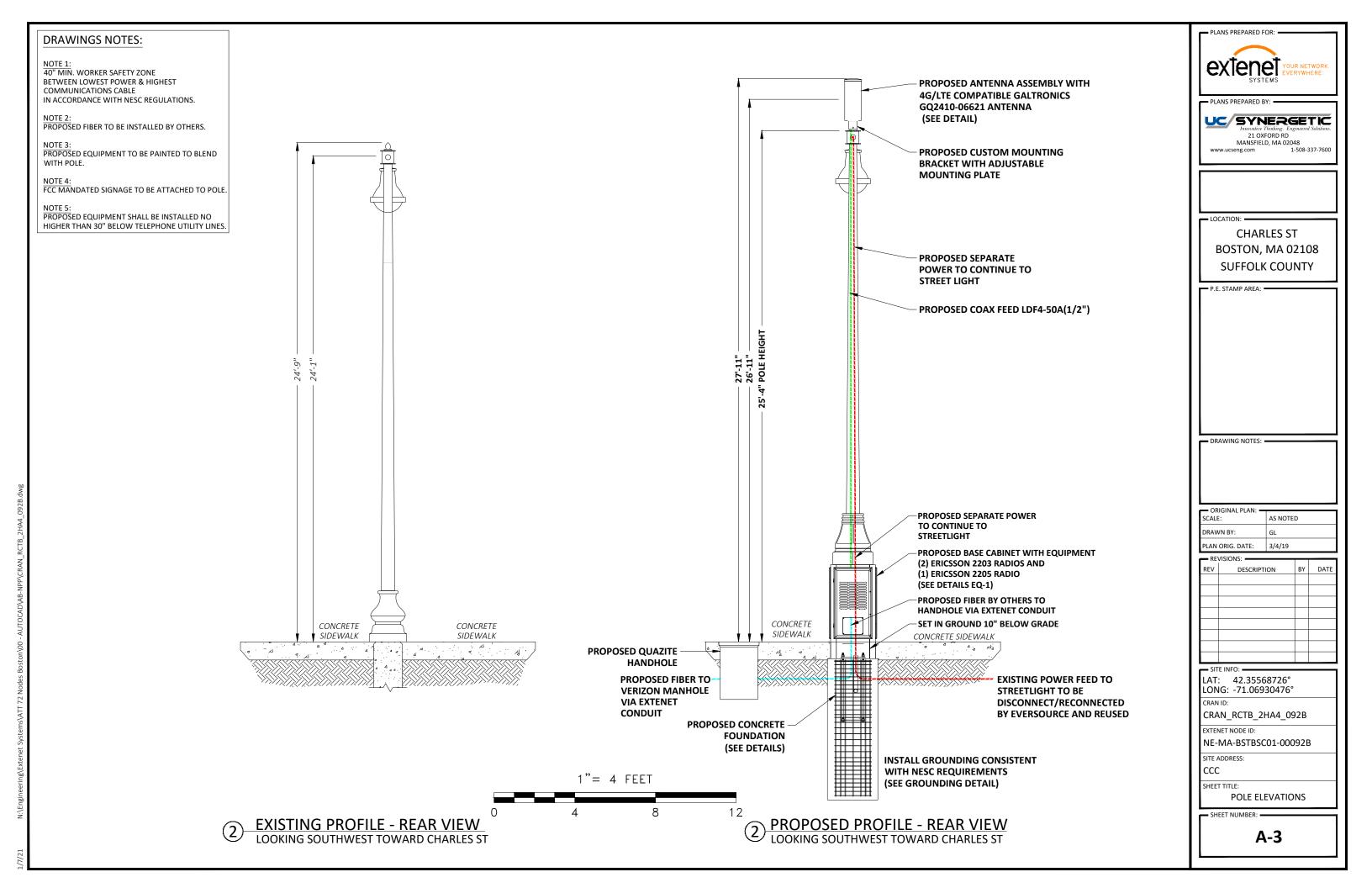
SITE ADDRESS:

CCC SHEET TITLE:

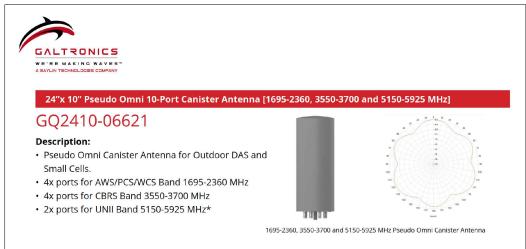
POLE ELEVATIONS

SHEET NUMBER:

**A-2** 







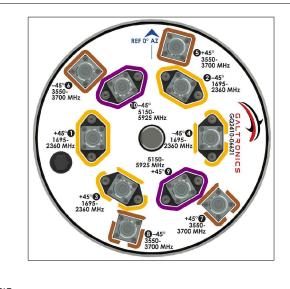
Ø254 mm

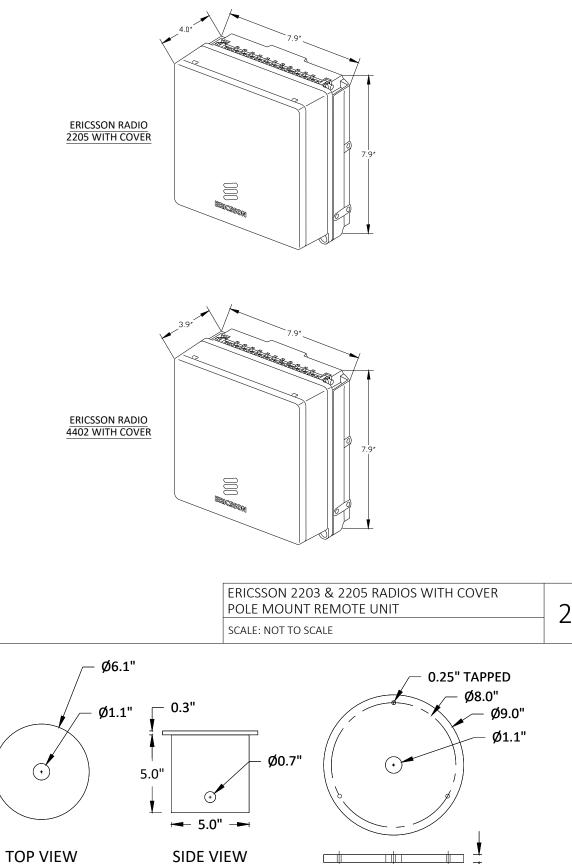
10"

628 mm

24.9"

FROM BOTTOM PLATE 63mm(2.5")



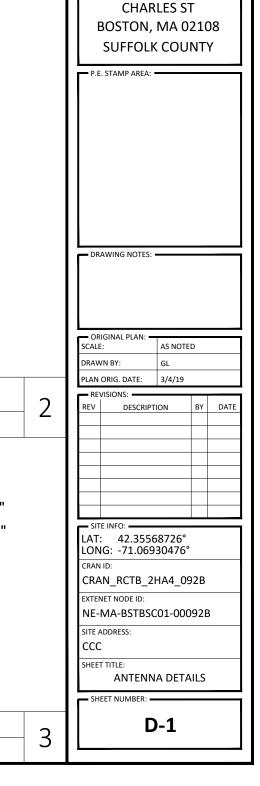


0.5"

ADJUSTABLE PLATE

CUSTOM MOUNTING BRACKET

SCALE: NOT TO SCALE



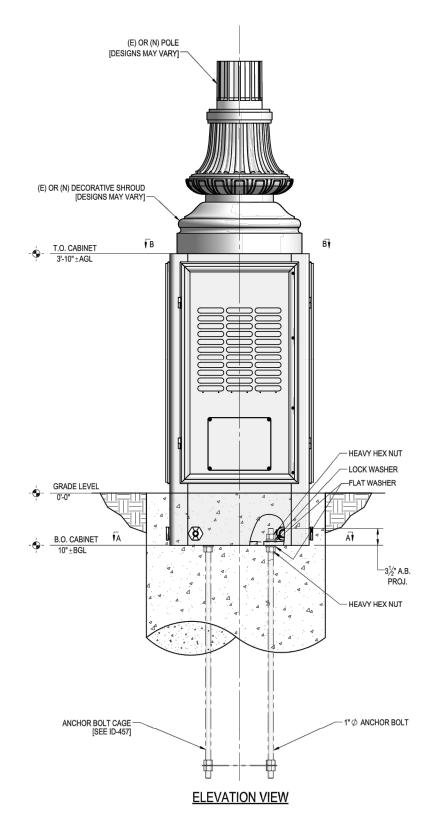
PLANS PREPARED FOR:

PLANS PREPARED BY:

Innovative Thinking. Engineered Solutions. 21 OXFORD RD MANSFIELD, MA 02048

PHAZAR O-6002v-W4U6-F6 ANTENNA

SCALE: NOT TO SCALE



*	ITEM #	PART#	DESCRIPTION	QTY.	UNIT WT.(lbs)
*	1	AA-001	SH 12GA. x 13/16" x 2 1/4" G90, ION HANGING HOOK		0.1
*	2	AA-033	16GA.x1'-10 13/16"x3'-6 5/8" E.G. MATERIAL, VENTED COVER		41
*	3	AA-036	SH 16GA.x1'-10 13/16"x3'-6 5/8" E.G. MATERIAL, VENTED COVER		24
*	4	WA-940	20GA.x1'-5 1/4"x1'-5 1/4" S.S., FORMED SCREEN		3.3
*	5	WA-941	20GA.x1'- 3/4"x2'-1 3/4" S.S., FORMED SCREEN	2	3.4
*	6	WA-959	16GA.x10"x1'-0" E.G. MATERIAL, COVER PLATE	2	5.9
*	7	PL-1633	14GA.x8 1/2"x2'-8 1/4" E.G. MATERIAL, ADAPTER PLATE	4	4.8
*	8	WA-1687	14GA.x2'-1 3/16"x3'-6 1/2" E.G. MATERIAL, PLENUM	1	64
	9	WA-1988	2'-2 3/4" SQR. x 4'-8" TALL, A36 EQUIP. BASE WLDMNT	1	536
*	10	PL-3141	1/2"x7 1/4"x9 1/4" EMBOSSED DAMPING FOAM	4	1.5
*	11	PL-3188	SH 14GA. x 10" x 3'-4 5/8" G90, ADAPTER PLATE	4	9.9
*	12	PL-3191	SH 12 GA x 8 1/4" x 1'-4" G90, COVER PLATE	4	4
*	13	PL-3215	SH 12GA. x 7 1/2" x 1'-2" G90, FORMED BRACKET	1	3.1
*	14	PL-4603	SH 12GA.x3"x11 3/4" G90, BRKT	2	1
			HARDWARE		
*	15	PL-718	1/4"x2"x6" COPPER, BUS BAR	2	0.8
*	16	SS-908	3/4" NPT x 3" PVC, STRAINER	4	0.1
	17	70304	#8-32 x 3/4" HEX WASHER SLOTTED MACHINE SCREW, S.S.	6	0.01
	18	46005	#8 LOCK WASHER, S.S.	6	0.01
_	19	47005	#8 FLAT WASHER, S.S.	6	0.001
	20	59001	#8-32 MACHINE SCREW NUT, S.S.	6	0.01
*	21	71218	1/4"Ø x 1/2" TAMPER-RESIS. BUTTON-HD SCKT CAP SCRW, S.S.		0.001
	22	70216	1/4"Ø x 3/4" S.S., FLGD BUTTON-HD SCKT CAP SCRW	28	0.02
*	23	79100	1/4"Ø x 1" BOLT/NUT/LW, S.S.	2	0.3
*	24	71217	1/4"Ø x 1" TAMPER-RESISTANT BUTTON-HD, S.S.	16	0.002
*	25	80255	1/4"Ø x 1 1/2" THRD STUD, S.S.	20	0.02
*	26	41001	1/4"Ø LOCK WASHER, S.S.	24	0.002
*	27	40001	1/4"Ø FLAT WASHER, S.S.	32	0.003
*	28	55996	1/4"Ø HEX NUT, S.S.	24	0.01
*	29	91142	1/4" 1-LUG (4AWG-14AWG) BURNDY KA4C TERMINAL, COPPER	2	0.04
*	30	71017	3/8"Ø x 5/8" BOLT, S.S.	8	0.04
*	31	15230	3/8"Ø x 1" A307 FULLY THD'D BOLT/NUT/LW, GALV.	4	0.1
*	32	43010	3/8"Ø LOCK WASHER, S.S.	8	0.01
*	33	40011	3/8"Ø FLAT WASHER, S.S.	4	0.01
*	34	90060	3/8" STANDOFF INSULATOR (559640)	4	0.1
*	35	90801	3/4" NPT BULKHEAD FITTING	4	0.3
*	36	90803	3/4" NPT PVC PIPE CAP	4	0.04
		S FACTORY II			847



PLANS PREPARED BY:

UC SYNERGETIC

Innovative Thinking. Engineered Solutions.

Innovative Thinking, Engineered Solutions.
21 OXFORD RD
MANSFIELD, MA 02048
www.ucseng.com 1-508-337-7600

LOCATION:

CHARLES ST BOSTON, MA 02108 SUFFOLK COUNTY

P.E. STAMP AREA:

DRAWING NOTES: -

ORIGINAL PLAN:
SCALE: AS NOTED

DRAWN BY: GL
PLAN ORIG. DATE: 3/4/19

REVISIONS:

REV DESCRIPTION BY DATE

SITE INFO: LAT: 42.35568726° LONG: -71.06930476°

CRAN ID:

CRAN\_RCTB\_2HA4\_092B

EXTENET NODE ID:

NE-MA-BSTBSC01-00092B

SITE ADDRESS:

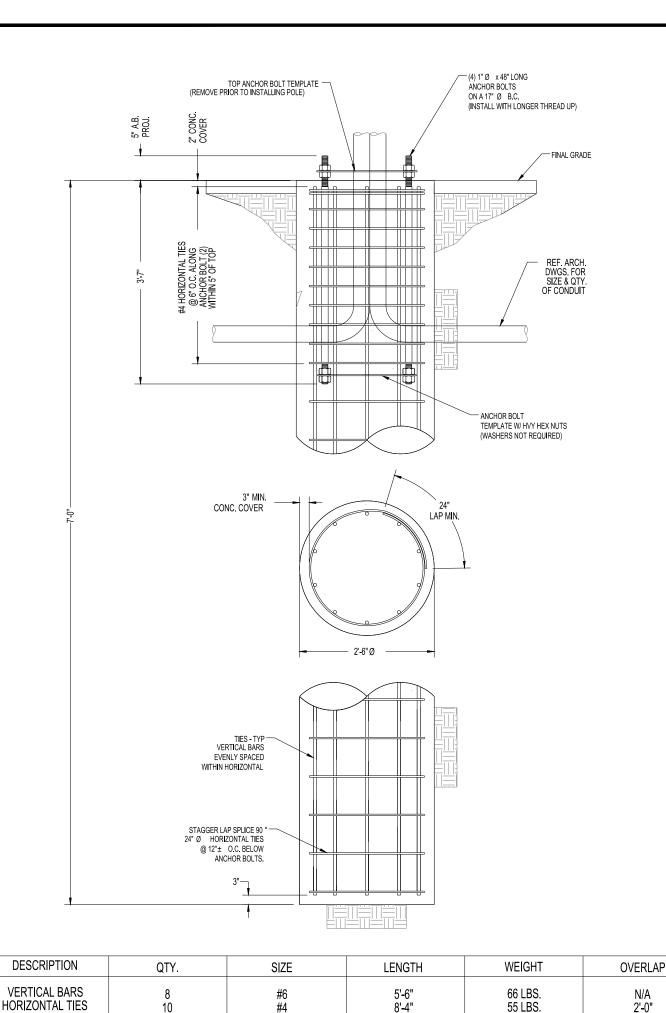
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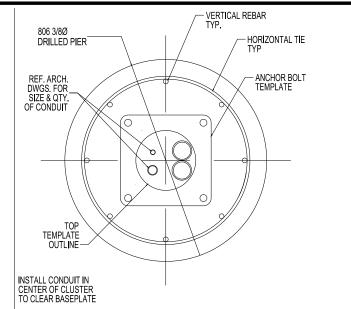
SHEET TITLE:
RADIO SHROUD DETAILS

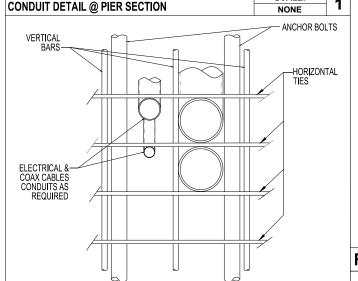
SHEET NUMBER

**D-2** 

 $2'-2\frac{3}{4}$ " SQ. x 4"-8" TALL, BASE CABINET SCALE: NOT TO SCALE



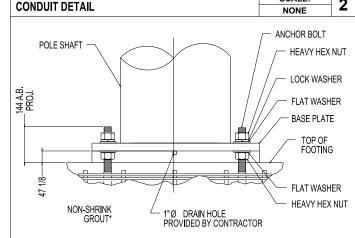




SCALE:

SCALE:

\* ADJUST REBAR AS NEEDED TO ACCOMMODATE CONDUIT. SEE REINFORCEMENT SUMMARY FOR SIZE, QUANTITY AND LOCATION OF VERTICAL BARS AND HORIZONTAL TIES.



NON-SHRINK GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 6,000 PSI.

BASE PLATE SHALL NOT BE GROUTED UNTIL AFTER THE STRUCTURE HAS BEEN INSTALLED AND PLUMBED.

SCALE: 3 **BASE GROUTING DETAIL** NONE

# **GENERAL NOTES**

- CONTRACTOR IS RESPONSIBLE FOR CHECKING AREA FOR UNDERGROUND FACILITIES PRIOR TO EXCAVATING ANY MATERIALS.
   CONTRACTOR SHALL INSPECT AND REMOVE ALL DEBRIS FROM BOTTOM OF
- CONTRACTOR SHALL VERIFY ANCHOR BOLT LAYOUT PRIOR TO, AND IMMEDIATELY AFTER PLACING CONCRETE. ANCHOR BOLT LAYOUT IS CRITICAL FOR MONOPOLE INSTALLATION.
- CRITICAL FOR MONOPOLE INSTALLATION.

  CONTRACTOR SHALL USE AND PROVIDE DEFORMED REINFORCING BARS
  CONFORMING TO ASTM A615 GR. 60 (60,000 PSI MIN. YIELD). CONTRACTOR
  SHALL USE STEEL WIRE TO HOLD REINFORCING BARS TOGETHER. IF
  WELDING REBAR IS PREFERRED, SUBSTITUTE USING A706 GR. 60
- CONTRACTOR SHALL USE AND PROVIDE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI. CONCRETE SHALL USE 1\* MAXIMUM STONE AGGREGATE. MIX DESIGN: 6 1/2 SACKS OF CEMENT MINIMUM PER CUBIC YARD. 5" MINIMUM AND 7" MAXIMUM CONCRETE
- SLUMP.
  CONCRETE SHALL BE CONSOLIDATED USING VIBRATORY METHODS
  THROUGHOUT DEPTH OF FOUNDATION, VIBRATING LOWER DEPTHS MAY BE
  ACCOMPLISHED BY TOUCHING REBAR CAGE WITH VIBRATOR.
  CONTRACTOR SHOULD ANTICIPATE THE USE OF A FULL-LENGTH
- CONTRACTOR SHOULD ANTICIPATE THE USE OF A FULL-LENGTH
  TEMPORARY CASING TO STABILIZE THE EXCAVATION. THE CASING SHALL
  BE WITHDRAWN DURING THE PLACEMENT OF CONCRETE IN THE
  EXCAVATED HOLE. CONCRETE SHALL BE PLACED USING CONVENTIONAL
  METHODS TO MINIMIZE SEGREGATION OF CONCRETE AND AGGREGATE.
  CONCRETE SHALL NOT FREE FALL MORE THAN 5 FT. CONCRETE MAY BE
- CONCRETE SHALL NOT FREE FALL MORE THAN 5 FT. CONCRETE MAY BE PLACED BELOW WATER USING TREMIE METHODS.

  8. CONCRETE SHALL BE PLACED TO THE DEPTH INDICATED, AND THE ABOVE GRADE PORTION SHALL BE FORMED. THE REBAR CAGE, ANCHOR BOLTS, AND CONCRETE SHALL BE PLACED WITHIN 24 HOURS OF COMPLETING THE EXCAVATION. COLD JOINTS ARE NOT ALLOWED.
  THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ADEQUATE CONCRETE
- COVERAGE OVER REINFORCING BARS TO MINIMIZE CORROSION POTENTIAL UNLESS OTHERWISE NOTED, CONTRACTOR SHALL USE 3" CONCRETE COVER OVER REBAR. TOP OF FOOTING SHALL BE TROWELLED LEVEL AND SMOOTH.

  10. DRILLED PIER FOUNDATION DESIGN PER 2009/2012 IBC, TABLE 1806.2,
- CLASS 4 MATERIAL
- 11. TOTAL VOLUME OF CONCRETE REQUIRED FOR THIS FOUNDATION IS APPROXIMATELY 1.1 CU. YDS.



- PLANS PREPARED BY:



LOCATION:

**CHARLES ST** BOSTON, MA 02108 SUFFOLK COUNTY

P.E. STAMP AREA:

DRAWING NOTES: •

AS NOTED

3/4/19

## **FACTORED BASE REACTIONS**

**MOMENT** = 30.9 ft-kips SHEAR = 2.46 kips **VERTICAL** = 1.67 kips

─ RE`	VISIONS: ————		
REV	DESCRIPTION	BY	DATE

## SPECIAL INSPECTIONS

CONCRETE TEST SPECIMENS

PLACEMENT OF CONCRETE

SPECIAL INSPECTION: INSPE

SPECIAL INSPECTION. THE FOLLOWING ELEMENTS OF CONSTRUCTION SHALL REQUIRE SPECIAL INSPECTION PER 2009/2012 IBC, SECTION 1704				
ITEM	DESCRIPTION	INSPECTION BY	MATERIAL	
1	PIER EXCAVATION LATERAL BEARING CAPACITY	SOILS ENGINEER	300 PSF/FT LATERAL	
2	PIER CONSTRUCTION REINFORCING STEEL BAR SIZES AND INSTALLATION	SPECIAL INSPECTOR	ASTM A615 GR. 60	
3	ANCHOR BOLTS BOLT SIZE AND LENGTHS INSTALLATION	SPECIAL INSPECTOR	ASTM F1554 GR. 55	

SPECIAL INSPECTOR

LAT: 42.35568726° LONG: -71.06930476° CRAN ID:

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EXTENET NODE ID:

ORIGINAL PLAN:

PLAN ORIG. DATE:

RAWN BY

NE-MA-BSTBSC01-00092B

SITE ADDRESS: CCC

SHEET TITLE:

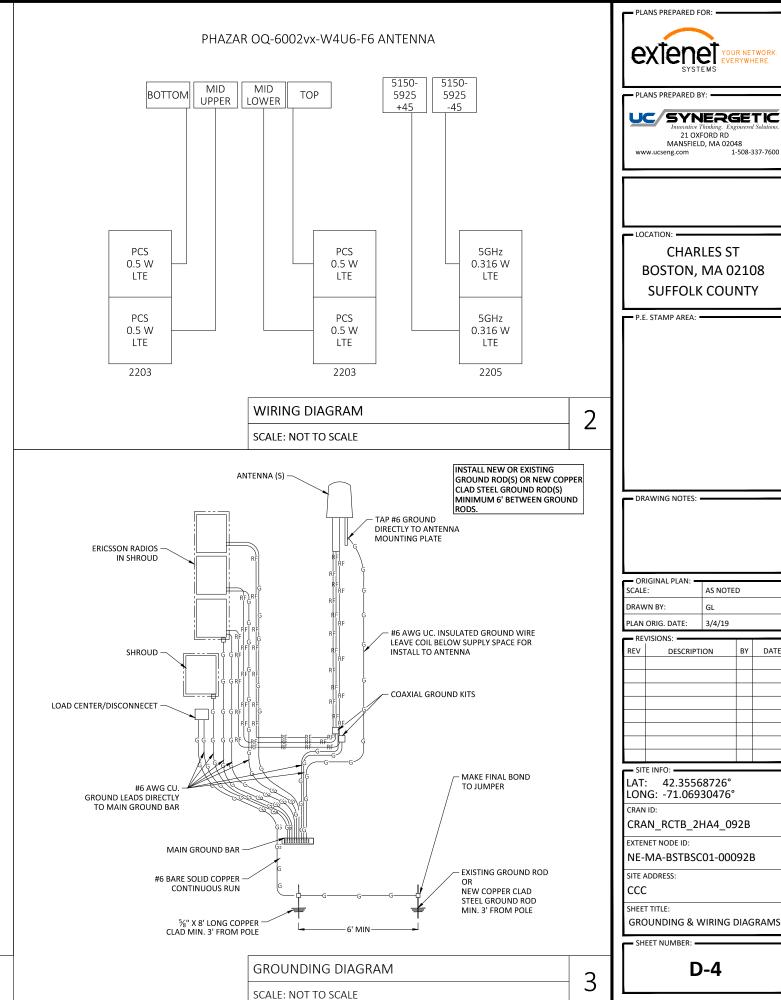
SHEET NUMBER:

fc = 4,000 PSI TYPE II CEMENT

**D-3** 

FOUNDATION DETAILS





21 OXFORD RD MANSFIELD, MA 02048

**CHARLES ST** 

BOSTON, MA 02108

SUFFOLK COUNTY

AS NOTED

DESCRIPTION

**D-4** 

- 1.1 CONTRACT OVERVIEW
  1. THE INTENTION OF THESE DOCUMENTS IS TO SHOW THE COMPLETE INSTALLATION AND TO INCLIDE ALL LABOR AND MATERIALS REASONABLY NECESSARY, WHETHER OR NOT SPECIFICALLY INDICATED, FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT. THE INTENT OF THE PROPESSIONAL KNOWLEDGE AND SKILLS. THEY ARE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, SEQUENCING AND COORDINATING OF ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
  2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT ENTORING OF THE POLLOWING CODES, STANDARDS, AND SUPPLEMENTS:

   RULES AND SPECIFICATIONS FOR EXCAVATION ACTIVITY WITHIN THE CITY OF BOSTON

- IBC INTERNATIONAL BUILDING CODE
- ACI AMERICAN CONCRETE INSTITUTE
- AU. AMERICAN CONTROL ELISTING E
   AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS
   IEEE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
   NEC NATIONAL ELECTRICAL CODE
- NESC NATIONAL ELECTRICAL SAFETY CODE
- UL UNDERWRITERS LABORATORIES NSPC - NATIONAL STANDARD PLUMBING CODE
- INC INTERNATIONAL MECHANICAL CODE
   NFPA NATIONAL FIRE PROTECTION ASSOCIATION
   OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINIST
- ANSI/TIA TELECOMMUNICATIONS INDUSTRY ASSOCIATION 222-G STANDARD
- · ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND ORDINANCES
- HE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS
- . THE ENGINEERING DRAWINGS SHOW PRINCIPAL AREAS WHERE WORK MUST BE ACCOMPUSHED UNDER THIS CONTRACT, INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE ENGINEERING DRAWINGS DUE TO CHANGES AFFECTING EXISTING ELECTRICAL OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO A PART OF THIS CONTRACT, INSPECT THOSE AREAS AND ASCERTAIN WHAT IS NEEDED TO DO THAT WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER.
- 4. DO NOT ESTIMATE DESIRED MEASUREMENTS BY MEASURING DRAWINGS. ALL SHOWN DIMENSIONS TAKE PRECEDENCE OVER SCALING. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK, HOWEVER, NO CHANGE THAT ALTERS THE OBJECTIVE AND INTENT OF THE DESIGN WILL BE MADE OR PERMITTED BY THE OWNER WITHOUT A CHANGE ORDER.
- SINDUCTURE VIRENT AND THE LESSING LATED LATED AND ADMINISTRATED AND ADMINISTRATED THE WORK AND ADMINISTRATED LATED THE USBELLINE AND MILE LESSING WILL BE AND CONTROLLED THE USBELL AND ADMINISTRATED TO THE USBELL AND ADMINISTRATED AND ADMINISTRATE
- ALL GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENT TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE
- S. ALL ESERVICE, URLS AND STRAIGHOUS LETAILS ARE THE MINIMUM REQUIREMENT TO BE USED IN COURTHAND WHICH ARE NOT SECRIFICALLY SHOWN OF ITEMS THE POOR THE STORY OF THE TOWN OF THE TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF THE SURVEY DRAWING AND SURVEYORS MARKINGS AT THE SITE OF THE SURVEY DRAWING AND SURVEYORS MARKINGS AT THE SITE OF THE SURVEY DRAWING AND THE TRUE NORTH, AND SHALL NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL SUBJECT SHALL SUBJECT SHALL SHALL
- 11. THE CONTRACTOR WILL BE REQUIRED TO ASSURE DUE, AND COMPLETE RESPONSIBILITY FOR THE JOB STEE CONDITIONS DURING THE PROJECT ON THE PROJECT. THE RICLUSES THE SACLEDS THE SACLED THE SACLEDS THE SACLEDS THE SACLEDS THE SACLED THE SACLEDS THE SACLED THE SACLEDS THE SACLED THE SACLED

- 15. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS AND COORDINATE THEIR WORK WITH THE WORK OF ALL OTHER CONTRACTORS TO ENSURE THAT WORK PROGRESSION IS NOT INTERRUPTED.
- 5. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOBSITE DURING THE PERFORMANCE OF THIS CONTRACT TO AVOID DELAYS IN THE SCHEDULE OR OTHER WORK PERFORMED IN THE VICINITY OF THE CONSTRUCTION AREA.
- THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE TO THE PROPERTY OWNER WELL IN ADVANCE OF THE STARTING DATE OF THE WORK. THE OWNER SHALL ALSO BE NOTIFIED OF A CHANGE IN THE CONSTRUCTION SCHEDULE.
- EACH CONTRACTOR IS RESPONSIBLE FOR PULLING BILLING PRINTING AT THE LOCAL JURISDICTION AS THE CONTRACTOR OF RECORD, AND SHALL PROVIDE THE JURISDICTION WITH ALL PROOF REQUIRED TO OPERATE AS CONTRACTOR IN THIS JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PULLING BILLING PRINTING INSECTION, CERTIFICATION, SEED, PRICE PRINTING INSECTION, SEED, SEED,
- 1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AMPLE NOTICE TO THE BUILDING INSPECTION DEPARTMENT TO SCHEDULE THE REQUIRED INSPECTIONS. A MINIMUM OF 48 HOURS OF NOTICE SHOULD BE GIVEN TO AUTHORITIES. AN EXTENSION IN THE CONTRACT SCHEDULE WILL NOT BE GRANTED DUE TO DELAY CAUSED BY INSPECTIONS.
- EACH CONTRACTOR IS RESPONSIBLE FOR APPLICATION AND PAYMENT OF CONTRACTOR LICENSES, BONDS AND INSURANCES, DOCUMENTATION SHALL BE PROVIDED TO THE OWNER PRIOR TO WORK
- 2. A COPY OF THE APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY LAW 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 PURPOSE OF DOCUMENTING ALL AS-BUILTS, CHANGES, REVISIONS, ADDENDA, OR CHANGE ORDERS. 3. THE CONTRACTOR IS TO PROVIDE THE OWNER WITH A FULL SET OF RECORD DRAWINGS WITH ACTUAL DIMENSIONS, ROUTING AND CIRCUITS UPON COMPLETION OF CONSTRUCTION.
- I. THE CONTRACTOR IS TO CONTACT BOTH LOCAL POWER AND TELEPHONE UTILITY COMPANIES BEFORE CONSTRUCTION BEGINS TO ORDER SERVICE, OBTAIN AND PAY ALL FEES ASSOCIATED WITH THE CONSTRUCTION, SCHEDULE INSTALLATION OF SERVICE, COORDINATE CONDUIT RUNTERMINATION POINTS AND OBTAIN ANY FIELD MATERIALS THAT MAY BE SUPPLIED BY THE UTILITY COMPANIES AND INSTALLED BY THE CONTRACTORS.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORM WORK AND THE PROTECTION OF ALL WORK DURING CONSTRUCTION TO AVOID DAMAGE, COLLAPSE, DISTORTION, MISALIGNMENT AND ALTERATION OF EXISTING WARRANTIES. 6. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY POWER, WATER AND TOILET FACILITIES AS REQUIRED BY THE PROPERTY OWNER OR GOVERNING AGENCY
- THE CONTRACTOR SHALL MONITOR ALL EXISTING STRUCTURES DURING CONSTRUCTION

- 7. THE CONTINGED TO SHALL BONDING THE FEARL DIBERTS OF THE CONTING CONSTRUCTION.

  8. THE CONTRACTOR SHALL CORDINATE THE FRAIL DIBERTS OF STRUCTURED LAYOUT WITH THE FOOTPRINT OF THE NEW EQUIPMENT BEFORE ORDERING ANY MATERIALS.

  9. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN SAFE CONDITION PRIOR TO INSTALLATION, AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT, FOR EACH CLASS, GROUP, OR EQUIPMENT.

  10. ALL MATERIALS MUST BE STORED ON A LEVEL AND DRY LOCATION AND IN A MANURE THAT WILL NOT OBSTRUCT THE FLOW OF OTHER WORK PLAILED OR NOT RELATED OR NOT RELATED TO THIS CONTRACT. ANY EQUIPMENT OR MATERIAL STORAGE MUST MEET ALL RECOMMENDATIONS OF THE MANUFACT CONTRACTORS HALL INSPECT THROUGHOUTLY AND EACH OF ADMINISTRACT AND EQUIPMENT OR MATERIAL STORAGE MUST MEET ALL RECOMMENDATIONS OF THE MANUFACT CONTRACTORS HALL INSPECT THROUGHOUTLY AND EACH OF ADMINISTRACT AND EQUIPMENT OR MATERIAL STORAGE MUST MEET ALL RECOMMENDATIONS OF THE MANUFACT CONTRACTORS HALL INSPECT THROUGHOUTLY AND EACH OF ADMINISTRACT.

  10. THE MATERIALS MUST BE STORED ON A LEVEL AND DRY LOCATION AND IN A MANUFACT CONTRACTORS HAVE AND REPORT AND ADMINISTRACT. AND EQUIPMENT OR MATERIAL STORAGE MUST MEET ALL RECOMMENDATIONS OF THE MANUFACT CONTRACTORS HAVE BEEN AND ADMINISTRACT. AND EQUIPMENT OR MATERIAL STORAGE MUST MEET ALL RECOMMENDATIONS OF THE MANUFACT CONTRACTORS HAVE BEEN AND ADMINISTRACT.

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  10. THE MATERIAL MADERN THROUGH
- SING" AND SIGNS THAT STATE OWNERSHIP AND EMERGENCY TELEPHONE NUMBERS, NO SIGN SHALL BE LOCATED ON THE PROPERTY. EXISTING SIGNS WILL BE MAINTAINED AND PROTECTED
- 2 EXISTING CONDITIONS AND STRUCTURES
- BEFORE BEGINNING WORK AT THE STIE, THE CONTRACTOR SHALL INSPECT THE EXISTING PROPERTY OR BUILDING AND DETERMINE THE EXTENT OF EXISTING FINISHES, SPECIALTIES, EQUIPMENT AND OTHER ITEMS WHICH MUST BE REMOVED AND REINSTALLED IN ORDER TO PERFORM THE WORK NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCES BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION PRAININGS. ALL WORK SHALL BE PERFORMED IN A WORKANULKE BEAMSEN IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRAININGS.
- BY SUBMITTING A BID FOR THIS WORK, THE CONTRACTOR ACKNOWLEDGES THAT HE HAS THOROUGHLY REVIEWED AND UNDERSTOOD THE CONSTRUCTION DOCUMENTS, VISITED THE SITE, AND IS FAMILIAR WITH THE CONDITIONS ENCOUNTERED AT THE SITE.
- LIN SAME THE OF IGNORANCE OF THE CONTRACT COOLINET SUSTED THE CONTROLOR DOCUMENTS, VISITED THE SITE, AND IS FAMILIAR WITH THE CONDITIONS ENCOUNTERED AT THE SITE.

  3. THE CONTRACTOR, IF WAMABEED HE CONTRACT, WILL, NOT BE ALLOWED ANY DESTREAD COMPRESSATION OF REASON OF ANY MATTER OF NOW HICH THE CONTRACTOR RIGHT NOT HAVE FLULY EVEN LODE PRIOR TO BEIDING.

  3. DO FLAG OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES THAT MAY BE ENCOUNTERED OR OF ANY OTHER RELEVANT MATTER CONCERNING THE WORK TO BE PERFORMED WILL BE ACCEPTED AS A REASON FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL THE REQUIREMENTS OF THE CONTRACTOR OF THE CON
- IT IS UNDERSTOOD BY THE OWNER THAT THE CONTRACTOR IN SUBMITTING HIS BID, WARRANTS THAT HE HAS CAREFULLY EXAMINED THE SITE OF THE PROJECT TO BECOME ACQUAINTED WITH THE SURROUNDING PROPERTIES, THE MEANS OF APPROACH TO THE SITE, THE CONDITIONS OF THE ACTUAL JOB SITE, THE FACILITIES FOR DELIVERING, STORING, PLACING, HANDLING, AND THE REMOVAL OF MATERIALS AND EQUIPMENT AND ANY AND ALL DIFFICULTIES THAT MAY BE ENCOUNTERED DURING THE EXECUTION OF ALL THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- L THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER OR IS EXECUTED WITH THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

  LYNE LOCATIONS OF EXISTING UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER OR ITS RESPONSIBILITY FOR ANY AND ALL

  DAMAGES WHICH MIGHT BE CAUSED BY THE CONTRACTOR'S FAILURE TO LOCATE ALL UNDERGROUND UTILITIES BEFORE COMMENCING WORK.

  SHOULD ANY ERROR OR INCONSISTENCY APPEAR IN THE DRAWINGS OR SPECIFICATIONS, THE CONTRACTOR, BEFORE PROCEEDING WITH THE WORK, MUST MAKE MENTION OF THE SAME TO THE ENGINEER AND OWNER FOR PROPER ADJUSTMENT AND IN NO CASE PROCEED WITH THE WORK IN UNCERTAINTY OR

  WITH NO SUPPORT IN STRUCTION.
- ONTRACTOR AND EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK, NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCES BETWEEN ACTUAL DIMENSIONS AND SIGNE PROPERTY.

  SIGNIFICATION FOR SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSENTATION FOR APPROVAL OF THE MORE OF THE PROPERTY.

  ACCIOEN SOMES NEALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSENTATION FOR COMPRESSENTATION.
- TRADE, PRODUCT NAMES, MANUFACTURER NAMES, CATALOG NUMBERS, AND INDICATIONS OF EXISTING PRODUCT TYPES SHOWN ON THE DRAWINGS ARE BELIEVED TO BE ACCURATE. IF THEY ARE DISCOVERED TO BE INACCURATE, NOTIFY OWNERSINGINEERS IMMEDIATELY AND DO NOT PROCEED WI
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES AND EFFORTS TO PROTECT THE STRUCTURAL INTEGRITY OF EXISTING STRUCTURES AND PROPERTIES. WHEN WORK IS PERFORMED IN THE VICINITY OF EXISTING STRUCTURES, THE STRUCTURAL INTEGRITY AND STABILITY SHALL BE MONITORED AT ALL TIMES DURING EVERY PHASE OF THE CONSTRUCTION.
- THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER SUPERVISION OF A LICENSED LAND SURVEYOR.
- ). NEW CONSTRUCTION ADDED TO EXISTING CONSTRUCTION SHALL BE MATCHED IN FORM, TEXTURE, MATERIAL AND PAINT COLOR EXCEPT AS NOTED IN THE PLANS.
- . WHERE INDICATED ON THE PLANS, THE CONTRACTOR SHALL PAINT ALL NEW ANTENNAS, SHROUDS, AND RELATED MOUNTING HARDWARE TO MATCH THE EXISTING ADJACENT SURFACES. THE CONTRACTOR SHALL NOT USE A METAL BASED PAINT FOR ANTENNAS, ALL SURFACE CONTAMINATION SHALL BE REMOVED PRIOR TO PAINTING NEW SURFACES.

- . ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK SHALL BE PROTECTED AT ALL TIMES. WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, THEY SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES. THE CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW.
- S. IF AN INACTIVE ELECTRICAL, TELEPHONE, SEWER, WATER, OR ANY OTHER UTILITY ARE ENCOUNTERED AND INTERFERES WITH THE EXECUTION OF THE WORK, THE CONTRACTOR IS TO REMOVE THE UTILITY AND CAP, PLIG, OR OTHERWISE PROPERLY TERMINATE THE UTILITY AT A POINT WHERE IT NO LONGER CONTRACTOR WITH THE WORK, THE UTILITY WORK SHALL BE COME. A ACCORDANCE WITH THE UTILITY COMPANY'S RECOMMENDATIONS AND PER LOCAL AUTHORITY HANNE JURISDICTION.
  A LUTLITY WORK SHOULD RECORD TO STEAM SHALL BE COMPONATED WITH THE OWNERS FOR PRESENTATIVE AND THE UTILITY WORK PREFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE.
- 3. THE CONTRACTOR SHALL RESTORE ALL PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE
- 9. PROTECT FINISHED SURFACES INCLUDING JAMBS AND HEADS OF OPENINGS USED AS PASSAGEWAYS THROUGH WHICH EQUIPMENT AND MATERIALS WILL PASS.
- . PROVIDE PROTECTION FOR EQUIPMENT ROOM SURFACES PRIOR TO ALLOWING EQUIPMENT OR MATERIALS TO BE MOVED OVER, AROUND, OR WITHIN SURFACES. KEEP FINISHED SURFACES CLEAN, UNHARMED AND SUITABLY PROTECTED UNTIL JOB SITE IS ACCEPTED BY THE OWNER
- I THE EVENT OF DAMAGE TO AN EXISTING STRUCTURE. THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNERS REPRESENTATIVE IMMEDIATELY, AND THEN PROMPTLY MAKE ALL REPLACEMENTS AND REPAIRS TO THE SATISFACTION OF THE OWNER. THE OWNER MAY ELECT TO USE A NTRACTOR TO PERFORM THE REPAIRS. ALL EXPENSES ASSOCIATED WITH THE REPAIRS AND REPLACEMENTS SHALL BE PAID BY THE GENERAL CONTRACTOR SELECTED FOR THIS CONTRACT.
- ALL CUTS ON CONCRETE SIDEWALKS SHALL BE MADE FROM THE NEAREST JOINT OR SCORE LINE ON ONE SIDE OF THE EXCAVATION, TO THE NEAREST JOINT OR SCORE LINE ON THE OTHER SIDE OF THE EXCAVATION
- 1. ALL CUTS ON BRICK SIDEWALKS SHALL BE MADE BY NEATLY SQUARING ALL EDGES OF THE EXCAVATION TO THE NEAREST LINE OF FULL SIZE BRICKS. ALL BRICKS IN THE WAY OF THE EXCAVATION SHALL BE NEATLY REMOVED BY THE CONTRACTOR PRIOR TO ANY WORK BEING PERFORMED, AND STORAGE MAY INCLUDE STORAGE BY THE CONTRACTOR OR WITH ANOTHER FACILITY AS DIRECTED BY THE LOCAL JURISDICTION. BRICK SIDEWALK RESTORATION AFTER CONSTRUCTION SHALL CONFORM TO LOCAL JURISDICTION REQUIREMENTS.
- ALL CUTS ON ASPHALT SIDEWALKS SHALL BE MADE BY NEATLY SQUARING ALL EDGES TO FORM A RECTANGULAR SHAPE AT A 90 DEGREE ANGLE. ANY PAVEMENT OR LANE MARKINGS THAT ARE DISRUPTED BY THE WORK SHALL BE RESTORED ACCORDING TO LOCAL JURISDICTION REQUIREMENTS
- ANY PARKEN DICTANE MAKRINGS THAT ARE DISKOPTED BY THE WORK SHALL BE RESTORED ACCORDING TO LOCAL JURISDICTION REQUIREMENTS.
  ANY TRAFFIC LOOPS OR OTHER SIGNAL SYSTEMS EMBEDDED IN THE PUBLIC RIGHT-OF-WAY DISROPTED BY THE WORK SHALL BE RESTORED ACCORDING TO LOCAL JURISDICTION REQUIREM
  ADDITIONAL TIME REQUIRED TO SECURE REPLACEMENT AND MAKE REPAIRS WILL NOT BE CONSIDERED BY THE OWNER TO JUSTIFY AN EXTENSION IN THE CONTRACT TIME FOR COMPLETION
  ABSOLUTELY NO FIELD CORING / DRILLING / CUTTING OF METALLIC POLES TO BE ALLOWED.

2. THE CONTRACTOR SHALL COORDINATE ALL SPECIAL CONSIDERATIONS OF CONSTRUCTION SUCH AS NOISY OPERATION, INTERRUPTION OF ANY MECHANICAL ANDIOR ELECTRICAL SERVICES, MATERIAL DELIVERIES AND STORAGE, STAGING AREA, CRANE LIFTS, ETC. WITH THE PROPERTY OWNER OWNERS REPRESENTATIVE, ANDIOR LOCAL JURISDICTION PRIOR TO THE START OF WORK.

OWNERS REPRESENTATIVE, AND UT LOCAL JURISDICTION PROOF OF THE CONSTRUCTIVE, THE TEMPORARY REMOVAL OF FENCE, LANDSCAPING & ANY EXPECTED DAMAGE TO ACCESS ROAD OR ADJACENT REPAIR OF PROPERTY PRIOR TO COMMENCING THE WORK.

4. THE CONTRACTOR SHALL COORDINATE WORK HOURS & STIGNIO, AREAS WITH PROPERTY OWNER, PROPERTY OWNERS, REPRESENTATIVE, AND/OR LOCAL JURISDICTION.

5. CONTRACTOR TO NOTIFY PROPERTY OWNER OF THE CONSTRUCTION START DATE WELL IN ADVANCE OF CONSTRUCTION.

1.2 SITE MAINTENANCE REMOVE STANNING OR RETURN DEPORT A VACIOUS MARKED A VACIOUS MARKED A VACIOUS MARKED A VACIOUS AND A VACIOUS ACCUMULATIONS OF DEBRIS PROMPTLY, AT LEAST DAILY, CONFINE DUST PRODUCING OPERATIONS DURING CUTTING, DRILLING, PAINTING AND FINISHING. THERE SHOULD BE NO OWNER SPRAYING OR NET IN PARKING A VACIOUS MARKED AND A VACIOUS MARKED AND A VACIOUS MARK

. NOISE AND EXISTING BUILDING STRUCTURE VIBRATION GENERATED BY THE CONSTRUCTION PROCEDURES, EQUIPMENT, TOOLS AND OPERATIONS ARE TO BE KEPT TO A PRACTICABLE MINIMUM. WHERE USE OF HIGH NOISE LEVEL EQUIPMENT IS UNAVOIDABLE, AND CAN BE HEARD, CONFINE TO HOURS MANDATED BY THE LOCAL JURISDICTION AND THE PROPERTY OWNER OR OWNERS REPRESENTATIVE. 4. THE CONTRACTOR IS TO PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OR 2 ABC WITHIN 75FT OF TRAVEL TO ALL PORTIONS OF THE CONSTRUCTION AREA.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD AND GROUNDS. REMOVE AND DISPOSE, LEGALLY OFF SITE, ALL RUBBISH, WASTE MATERIALS, LITTER, AND ALL FOREIGN SUBSTANCES. REMOVE PETROCHEMICAL SPILLS, STAINS AN RAKE GROUNDS TO A SMOOTH EVEN-TEXTURED SURFACE AT PROJECT COMPLETION, REMOVE TEMPORARY SERVICES, CONSTRUCTION EQUIPMENT, TOOLS AND FACILITIES, MOCKUPS, TEMPORARY STRUCTURES, SURFLUS MATERIALS, DEBRIS, AND RUBBISH FROM PROPER STREN IN ALL ADDRESS PLACES AND AND FEEL FROM DEPORT YOUR FOREIGN FOR THE STRUCTURES AND FREE FACES AND OTHER SPACES AND OTHER

2. THE SITE AND/OR BUILDING SECURITY SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION IN ORDER TO PREVENT UNAUTHORIZED PERSONS FROM ENTERING THE PREMISES. EXISTING AND NEW EQUIPMENT AND MATERIALS REMAIN THE CONTI

1. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO MAINTAIN POLLUTION CONTROL, COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION, AND PROMPTLY REMOVE ALL DEBRIS AND ACCUMULATION OF MATERIALS RESULTING FROM THE WORK DEMOLITION AND EXISTING STRUCTURAL ALTERATION

.1 DEMOLITION SPECIFICS

1. GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR SHORING, BRACING, PROVIDING LATERAL SUPPORT, AND FOR MAINTAINING THE INTEGRITY OF THE EXISTING STRUCTURE DURING ALL PHASES OF THE DEMOLITION AND CONSTRUCTION AND SHALL PROVIDE, IF REQUIRED, SIGNED AND SEALED SHOP PROVIDING, BY A REGISTERED PROFESSIONAL ENGINEER, FOR THE SHORING OF ALL WALLS, BEARS, SLASS, ROOF, JOISTS, OR OTHER ELECTRICES STRUCTURAL ITEMS, THAT ARE HAVING SUPPORT NOTED FOR DEMOLITION.

2. ANY DAMAGE BUT TO DEMOLITION, OR OTHER CONSTRUCTION ACTIVITIES, DONE TO ANY EXISTING SUPPORT SHOWS SHALL BE REPARRED TO MATCH EXISTING AT NO ADDITIONAL COST TO THE CONSTRUCTION ACTIVITIES.

1.2 CUTTING & PATCHING

1.00 NOT DRILL OR CUIT EXISTING FLOOR JOISTS, BEAMS, COLUMNS OR OTHER STRUCTURAL ELEMENTS UNLESS SPECIFICALLY INDICATED. DRILL SLABS WHERE APPROVED. CORE DRILL CIRCULAR OPENINGS THROUGH CONCRETE SLAB. LINE DRILL FOR RECTANGULAR OPENINGS, MAKE OPENINGS OF PROPER SIZE FOR CONDUIT, DUCTS, PIPES AND OTHER ITEMS PASSING THROUGH OPENINGS, MAKE ALL NEW HOLES OR OPENINGS WEATHER TIGHT AND/OR FIRE SAFE AS REQUIRED BY LOCAL BUILDING CODES & ORDINANCES.

2. WHERE CUITTING OF EXISTING SURFACES OR REMOVAL OF EXISTING FINISHES IS REQUIRED TO PERFORM THE WORK UNDER THIS CONTRACT AND A NEW FINISH IS NOT INDICATED, FILL RESULTING OPENINGS AND PATCH THE SURFACE AFTER DOING THE WORK AND FINISH TO MATCH ADJACENT EXISTING SURFACES.

8. EXCEPT IN SPACE WHERE NO WORK UNDER THIS CONTRACT IS REQUIRED. ENCLOSE EXISTING AND NEW CONDUITS, DUCTS, PIPES, AND SIMILAR ITEMS IN FURRING WHERE SUCH ITEMS PASS THROUGH FIN

A EARLEY INSPIRED WHERE AN WORK UNDER THIS CONTINUE TO REQUIRED, EXCLUSE AND INSPIRED WHERE AND AREA CONTINUED WHERE SHAPE IN A PROPRIET OF THE WORK UNDER THIS CONTINUE WHERE SHAPE IN A PROPERTY OF THE WORK OF THE WORK

3. SITE WORK

3.1 CLEARING AND GRUBBING

CLEARING OF TREES AND VEGETATION ON THE SITE SHOULD BE HELD TO A MINIMUM. ONLY TREES NECESSARY FOR THE CONSTRUCTION OF THE FACILITY SHALL BE REMOVED. ANY DAMAGES TO PROPERTY OUTSIDE THE CONSTRUCTION UNIT SHALL BE REPARED OR REPLACED AT THE CONTRACTORS EXPENSE.

2. THE CONTRACTOR SHALL PROTECT EXISTING TRESS, VEGETATION, LANDSCAPING, MATERIALS AND SITE IMPROVEMENTS NOT SCHEDULED FOR CLEARING OR REMOVAL WHICH MIGHT BE DAMAGED BY CONSTRUCTION ACTIVITIES.

3. TRIM EXISTING TREES AND VEGETATION AS RECOMMENDED BY THE ARBORIST FOR PROTECTION DURING CONSTRUCTIO

4. CLEAR AND GRUB STUMPS, VEGETATION, DEBRIS, RUBBISH, DESIGNATED TREES REQUIRED FOR THE SITE IMPROVEMEN

5 STRIP AND STOCKPILE TOPSOIL

7. MARK DESIGNATED TREES AND VEGETATION DURING CONSTRUCTION ACTIVITIES.
8. PROVIDE TEMPORARY EROSION CONTROL, SILTATION CONTROL AND DUST CONTROL.

9. REMOVE AND LEGALLY DISPOSE OF CLEARED MATERIALS

3.2 EXCAVATION AND BACKFILL

2. BROKEN PAYEMENT, STONES GREATER THAN THREE (8) INCHES IN DIAMETER, ROOTS AND OTHER DEBRIS SHALL NOT BE USED IN BACKFILL. NO MATERIAL SHALL BE LEFT IN THE PUBLIC RIGHT-OF-WAY ONCE WORK HAS BEEN COMPLETED.
3. EXCAVATED MATERIAL SHALL BE REMOVED FROM THE WORK SITE AND DISPOSED OF IN A MANNER SUCH THAT INTERFERENCE WITH AND OBSTRUCTION TO VEHICULAR AND PEDESTRIAN TRAFFIC IS MINIMIZED.

4. PRIOR TO BACKFILLING, THE CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION IF REQUIRED AND ALLOW ADEQUATE TIME FOR INSPECTION

4. PROOF TO BRANCHEINS. THE CUSTINGLIES SHALL NOTIFY THE LOCAL JURISDICTION IN REQUIRED MEDIAL POWER PROPERTY.

5. EARCHFLIENS SHALL COURD ON THE SAME DAY AS THE ECONALTION. IT IS NOT POSSIBLE DUT TO THE COMPLEX NATIONAL POWER NATURE OF THE WORK, EMERGENCY, OR UN-PREVENTABLE CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE LOCAL JURISDICTIONS) AND TAKE APPROPRIATE
NESSURES TO PROTECT FUSIC SAFET AND INFRASTRICTION ELIGIBLE VIOLENT LIVER LOCAL JURISDICTIONS).

6. INDER NO GROWINSTRACES SHALL AN OPEN EXCLANATION BE LET HUNTEROOD OVERHIGHT. INLESS PROPERLY BARRICADED IN A MANNER MEETING WITH APPROVAL FROM LOCAL JURISDICTIONS).

7. ALL PAVEMENT BACKFILL MATERIAL SHALL BE PROCESSED GRAVEL. PAVEMENT BACKFILL SHALL MEET THE SELECTED FILL STANDARDS AS SHOWN BELOW, UNLESS STRICTER REQUIREMENTS ARE IMPOSED BY THE OWNERS REPRE
REQUIREMENTS OF THE LOCAL JURISDICTION, WHICHEVER IS MORE STRINGENT.

PERCENT PASSING SIEVE DESIGNATION 1-1/2 INCH

THE USE OF CONTROLLED DENSITY FILL (CDF) MAY BE MANDATED BY THE OWNER'S REPRESENTATIVE, GEOTECHNICAL REPORT RECOMMENDATION, OR BY THE LOCAL JURISDICTION. REPRESENTATIVE, GEOTECHNICAL REPORT RECOMMENDATIONS, OR THE REQUIREMENTS OF THE LOCAL JURISDICTION, WHICHEVER IS MORE STRINGENT.

THE CDF INGREDIENTS SHALL COMPLY WITH THE FOLLOWING

iv. AIR ENTRAINING ADMIXTURES: AASHTO M.4.02.05 THE CDF MUST MEET THE FOLLOWING REQUIREMENTS. COMPRESSIVE STRENGTH AT 28 DAYS: 30-80 PSI (210-550kPs

COMPRESSIVE STRENGTH AT 90 DAYS: 100 PSI MAX. (700 kPa MAX.

9. THE PROJECT INCLUDES: . EXCAVATION, TRENCHING, FILLING, COMPACTING AND GRADING FOR STRUCTURES.

 ALL MATERIALS FOR SUB-BASE, DRAINAGE FILL, BACK FILL, GRAVEL FOR SLABS, PAVEMENT AND IMPROVEMENTS. ROCK EXCAVATION WITHOUT BLASTING

SUPPLY OF ADDITIONAL MATERIALS FROM OFF SITE AS REQUIRED

\* SUPPLY OF ADDITIONAL MINERALS PROM OF \$16 AS REQUIRED.

THE COMPACTING UNDER STRUCTURES, BUILDING SLABS, STEPS, PAVEMENT AND WALKWAYS SHALL BE 95% MAXIMUM DENSITY, ASTM D-1557, TESTED IN EACH OF THE COMPACTING LAYERS AT EACH COMPACTING SITE, OR AT LEAST IN EACH 100 CU. YARDS OF MATERIAL VOLUME.

THE COMPACTING UNDER STRUCTURES, BUILDING SLABS, STEPS, PAVEMENT AND WALKWAYS SHALL BE 95% MAXIMUM DENSITY, ASTM D-1557, TESTED IN EACH OF THE COMPACTING LAYERS AT EACH COMPACTING SITE, OR AT LEAST IN EACH 100 CU. YARDS OF MATERIAL VOLUME.

6. IF A LAYER OF CONCRETE, COBBLESTONE, GRANITE PAVERS, OR OTHER SUPPORTING MATERIAL EXISTS, CONTRACTOR SHALL INSTALL CONCRETE TO MATCH THE EXISTING DEPTH PRIOR TO INSTALLATION OF TEMPORARY PAVEME 7. WHEN BACKFILL CANNOT EFFECTIVELY BE COMPACTED TO 95% MAXIMUM DENSITY DUE TO MULTIPLE CONDUITS, DUCTS OR PIPES, CONTROLLED DENSITY FILL (CDF) MAY BE REQUIRED.

8. THE COMPACTING UNDER LAWNS OR UNPAVED AREAS SHALL BE 85% MAXIMUM DENSITY. ASTM 01557 GRAVELSHALL BE PLACED UP TO THREE (3) INCHES BELOW GRADE OF EXISTING ASPHALT TO ALLOW ROOM FOR THREE (3) INCHES OF COMPACTED HIMA TEMPORARY SURFACE

1. GROWER SHALL BE PLACED ON A BED OF SIX (6) INCHES OF CRUSHED STONE.
3. CURB STONES MUST BE PLACED ON A BED OF SIX (6) INCHES OF CRUSHED STONE.

9. THE COMPACTED LAYERS SHALL NOT EXCEED 8 INCHES.

10. AREAS THAT DO NOT MEET ASTM D-1557 REQUIREMENTS MUST BE RECOMPACTED AT THE CONTRACTOR'S EXPENSE

1. ALL TRENCH EXCAVATIONS AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH OSHA REGULATIONS FOR CONSTRUCTION 12. WHERE UNSTABLE SOIL CONDITIONS EXIST, LINE THE GRUBBED AREAS WITH GEOTEXTILE FABRIC (MIRAFL 500X OR APPROVED EQUIVALENT) PRIOR TO PLACING FILL OR BASE MATERIAL.

3. THE USE OF EXPLOSIVES IS PROHIBITED ON SITE

13. ITEL USE OF EXPLOSIVES IS PROFIBITED ON SITE.

14. ALL EXCAVATION ON WHICH CONCEPTE IS TO BE PLACED SHALL BE SUBSTANTIAL HORIZONTAL, UNDISTURBED AND BE FREE FROM LOOSE MATERIAL AND EXCESS GROUND WATER, DEWATERING FOR EXCESS GROUND WATER SHALL BE PROVIDED IF REQUIRED.

15. ANY EXCAVATION OVER THE REQUIRED DETH SHALL BE FILLED WITH OTHER MECHANICALLY COMPACTED GRANULAR MATERIAL OR CONCRETE OF THE SAME QUALITY SPECIFIED FOR THE FOUNDATION, CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION, STONE, IF USED, STABILIZE THE FOUNDATION, CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION.

AFTER COMPLETION OF THE FOUNDATION AND OTHER CONSTRUCTION BELOW GRADE AND BEFORE BACKFILLING, ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIALS SUCH AS VEGETATION, WOOD, DEBRIS, TRASH, AND ANY FOREIGN MATERIAL 3.3 DRAINAGE

3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE AWAY FROM BUILDING OR EQUIPMENT ON THE SITE AT ALL TIMES. SILT AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE OF THE SITE AT ALL TIMES. STORM WATER FLOW SHALL NOT BE IMPEDED.
ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

extenet IR NETWORK

PLANS PREPARED FOR:

- PLANS PREPARED BY: -UC/SYNERGETIC MANSFIELD, MA 02048 1-508-337-7600 www.ucseng.com

**CHARLES ST** BOSTON, MA 02108 SUFFOLK COUNTY

DRAWING NOTES: -

P F STAMP AREA

ORIGINAL PLAN: AS NOTED DRAWN BY: PLAN ORIG. DATE: 3/4/19

- REVISIONS REV DAT DESCRIPTION

LONG: -71.06930476° CRAN ID: CRAN\_RCTB\_2HA4\_092B

LAT: 42.35568726°

EXTENET NODE ID: NE-MA-BSTBSC01-00092B

SITE ADDRESS CCC

> SHEET TITLE: **GENERAL NOTES**

SHEET NUMBER:

GN-1

#### ROSION CONTROL MEASURES MAY BE REQUIRED IN ADDITION TO THOSE SHOWN ON DRAWINGS WHERE DETERMINED NECESSARY BY ACTUAL SITE CONDITIONS CONCRETE .1 GENERAL DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES • ACI 301 - SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS ACI 304 - GUIDE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE ACI 309 - GUIDE FOR CONSOLIDATION OF CONCRETE ACI 318 - BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE • ACI 318 - BULLING CODE REQUIREMENTS FOR REINFORCED CONCRETE • ACI 544 R. - REFRENENCEDE DONNORTE (IF SPECIFIED) • ACI 544 R. - REFRENENCEDE DONNORTE (IF SPECIFIED) • ACI 544 R. - REFRENENCEDE DONNORTE (IF SPECIFIED) • ACI 544 R. - REFRENENCEDE DONNORTE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENCED FOR REINFORCED CONCRETE (IF SPECIFIED) • ACI 544 R. - REFRENCED FOR REINFORCED CONCR IMUM AGGREGATE SIZE SHALL BE 1 THE FOLLOWING MATERIALS SHALL BE USED: PORTLAND CEMENT REINFORCEMENT: ASTM A185 & A615 NORMAL WEIGHT AGGREGATE: ASTM C33 • WATER DRINKARI F REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS OTHERWISE NOTED, WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 165 WELDED WIRE FABRIC UNLESS OTHERWISE NOTED. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, U.N.O. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS: · CONCRETE CAST AGAINST EARTH: 3 IN CONCRETE EXPOSED TO EARTH OR WEATHER: #5 AND SMALLER AND WWF: 1 1/4 IN CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND: SLABS AND WALL: ¾ IN BEAMS AND COLUMNS: 1 ½ IN A CHAMFER OF 1/4 IN SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE. U.N.O. IN ACCORDANCE WITH ACI 301 SECTION 4.2.4 INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE CURRING COMPOUNDS SHALL CONFORM TO ASTM C - 309. ADMIXTURE SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI-30 CONCRETE FOR REPLACEMENT CONCRETE SIDEWALKS OR DRIVEWAYS SHALL BE PLACED TO A THICKNESS NOT LESS THAN 6", AND NOT MORE THAN THE THICKNESS OF THE ADJACENT CONCRETE SIDEWALK OR DRIVEWAY. . DO NOT WELD OR TACKWELD REINFORCING STEEL ALL DOWELS ANCHOR ROLES EMBEDMENT STEEL ELECTRICAL CONDUITS PIPES I FEVES GROLINDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE REFORE START OF CONCRETE PLACEMENT LOCATE ADDITIONAL CONSTRUCTION ICHNES PECHIPER TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER DI ACE PEINEORCEMENT CONTINUICIES Y THE 5. LOCAL A DUBLISHING CONTROL FOR A SEQUENCE OF TRACINE TO A SEQUENCE OF THE SECOND PART DO NOT PLACE CONCRETE IN PONDING WATER, ICE, OR ON FROZEN GROUND. FOR COLD WEATHER AND HOT WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC, SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS MINIMUM. WASTE CEMENT FROM CLEANING OF CONCRETE DELIVERY TRUCKS SHALL NOT BE ALLOWED TO ENTER THE STORM DRAIN OR SEWER SYSTEM FOUNDATION GENERAL ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS, PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTIONS AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION. PRIOR TO INITIATING EARTHWORK OPERATIONS, GROUND WATER AND SURFACE WATER CONTROL MEASURES NEED TO BE TAKEN. THE CONTRACTOR SHALL PROVIDE ADEQUATE SLOPING, SHORING, AND BRACING FOR ALL EXCAVATION TO PROTECT ADJACENT STRUCTURES AND COMPLY WITH LOCAL CODES, ORDINANCES, OSHA AND ANSI REQUIREMENTS PRIOR TO CONSTRUCTION OF ANY PERMANENT STRUCTURE. THE SITE SHALL BE STRIPPED OF ALL SURFACE VEGETATION, TOP SOIL, AND ORGANIC MATERIAL: ALL WET, SOFT, LOOSE, FROZEN, OR OTHERWISE UNDESIRABLE SOIL SHALL BE REMOVED THE CONTRACTOR IS TO PREVENT SURFACE WATER FROM ENTERING EXCAVATIONS PURDLE AND FROM FLOODING ADJACENT PROPERTIES DURING CONSTRUCTION CONTRACTOR IS ALSO RESPONSIBLE FOR PREVENTING SOFTENING OF THE FOLINDATION SOILS PRIOR TO PLACING CONCRET THE EXPOSED SUB GRADE SHALL BE PROOFED ROLLED WITH MEDIUM WEIGHT ROLLERS OR OTHER APPROVED EQUIPMENT TO DETERMINE IF ANY POCKETS OF SOFT, COMPRESSIBLE SOIL EXISTS BELOW THE EXPOSED SUB GRADE. WHEREVER SUCH MATERIAL IS ENCOUNTERED, THE AREA SHALL BE UNDERCU ALL STRUCTURAL FILE EXTENDING FROM SUITABLE SUID GRADE TO BOTTOM OF FOUNDATIONS OR FLOOR SLABS SHALL CONSIST OF GRANULAR MATERIAL AND 3% TO 10% BY DRY WEIGHT PASSING THE U.S. STD #200 SIEVE SIZE, COMPACTED TO 55%, OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY AS EXTENDING PROVIDED TO 10% BY DRY WEIGHT PASSING THE U.S. STD #200 SIEVE SIZE, COMPACTED TO 55%, OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY AS EXTENDING PROVIDED TO 10% BY DRY WEIGHT PASSING THE U.S. STD #200 SIEVE SIZE, COMPACTED TO 55%, OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY AS EXTENDING PROVIDED TO 10% BY DRY WEIGHT PASSING THE U.S. STD #200 SIEVE SIZE, COMPACTED TO 55%, OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY AS . THE SOIL PREPARATION, INCLUDING FOOTING EXCAVATION, FILL, BACK FILL, AND COMPACTING SHALL BE DONE FOLLOWING THE RECOMMENDATION CONTAINED IN INTERNATIONAL BUILDING CODE (2012) PROPORTIONS OF CONCRETE MATERIALS SHALL BE SUITABLE FOR THE INSTALLATION METHOD UTILIZED AND SHALL RESULT IN DURABLE CONCRETE FOR RESISTANCE TO ANTICIPATED AGGRESSIVE ACTIONS IN THE VICINITY OF THE FOUNDATION. THE DURABILITY REQ CONCRETE MATERIALS SHALL CONFORM TO THE APPROPRIATE STATE REQUIREMENTS FOR EXPOSED STRUCTURAL CONCRETE. WELDING IS PROHIBITED ON REINFORCING STEEL EMBEDMENTS. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL RE 3 INCHES (76MM) LINLESS OTHERWISE NOTED, APPROVED SPACERS SHALL RE LISED TO INSURE A 3" (76MM) MINIMUM COVER ON REINFORCEMENT . MINIMUM CUNDAGE IE CUNYET DIX REIMFORCEMENT SYNALL BE 3 INCHES (RAMIN) UNLESS OF HERWISE NOT LIA. PAPPOVED SYNALENS SYNAL BE LOSED IN INSIGNER 3 IN CONCRETE COVER FROM THE FOR OF POLIDATION TO FORDS OF REINFORCEMENT SHALL NOT SEXCED 3 INCHES (FRAMIN) NOTE BE LESS THAN 2 INCHES (SHAM). FOOTING IS DESIGNED TO BEAR ON EXISTING NATURALLY OCCUPRING, NON-EXPANSIVE SOILS, OR ENGINEERED FILL CAPABLE OF SAFELY SUSTAINING 2000 PSI. IF SOIL PROPERTIES WERE NOT AVAILABLE. THE FOUNDATION DESIGN HAS BEEN DEVELOPED IN ACCORDANCE WITH GENERALLY ACCEPTED PROFESSIONAL BASED ON SOIL PARAMETERS FROM THE ABOVE REFERENCES BUILDING COOR A FOLLOWS. ALLOWABLE SOIL BEARING PRESSURE = 2000 PSI - ALLOWING LEURON PRESSURE - SOUT FOIT - ALLOWING ELS STANCE - 190 PSFIT. - FOUNDATION SHALL BE FORMED WITH PLYWOOD OR METAL PANELS SUFFICIENT FOR STRUCTURAL AND VISUAL REQUIREMENTS. FORMS SHALL BE STRUCTURALLY ADEQUATE TO WITHSTAND UNCURED CONCRETE PRESSURE. FORMS SHALL BE REMOVED ONCE CONCRETE HAS ATTAINED 75% OF ITS ULTIMATE. THE CONTRACTOR SHALL EXPECT SUBMERGED DRILLING CONDITIONS FOR DEEP FOUNDATION CONSTRUCTION SLICH AS DRILLED PIERS OR DEADMAN ANCHORS AND SHALL MORILIZE ACCORDINGLY TO CONCRETE SHALL BE SAMES IN A MANNER THAT WILL PREVENT SORGEATION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE MATERIALS, ON CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF CONCRETE SHALL BE SAMES OF SOLIA AND EXPENSION OF SOLIA FREE FALL CONCRETE MAY BE USED PROVIDED FALL IS VERTICAL DOWN WITHOUT HITTING SIDES OF EXCAVATION, FORM WORK, REINFORCING BARS, FORM TIES, OR OTHER OBSTRUCTIONS, UNDER NO CIRCUMSTANCES SHALL CONCRETE FALL THROUGH WATER 7. BURIED GROUND RING: THE EQUIPMENT/SHELTER PAD OR PLATFORM SHALL HAVE A BURIED GROUND RING (RIGG) THAT CONSISTS OR A RING NO. 2 AWG BARE, SOLD, ANNEALD, TINNED COPPER WINE AND EXTITEMENT/CALLY WELDED GROUND RODS. THE BCR DESIGN SHOULD RESULT IN 10 OHMS OR LESS WITH SOLD RESULT THE STATE OF THE STATE O FOUNDATION DESIGN ASSUMES CONTINUOUS CONCRETE PLACEMENT WITHOUT CONSTRUCTION JOINTS. OP OF FOUNDATION OUTSIDE LIMITS OF ANCHOR BOLTS SHALL BE SLOPED TO DRAIN WITH A FLOATED FINISH. AREA INSIDE LIMITS OF ANCHOR BOLTS SHALL BE LEVEL. WITH A SCRATCHED FINI EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3%%? (19mm x 19mm) MINIMUM. NITIMATE CONTACT BETWEEN CONCRETE AND SOIL WALLS OF PAD IS ESSENTIAL FOR ADEQUATE FOUNDATION PERFORMANCE. THE CONCRETE SHOULD BE APPROPRIATELY VIBRATED DURING CONSTRUCTION. 8. EXOTHERMIC WELDING: EXOTHERMIC WELDS SHALL BE CADWELD. A REGISTERED TRADEMARK OF ERCO PRODUCTS, INC. OF CLEVELAND, OHIO, OR THERMOWELD. A DIVISION OF CONTINENTAL INDUSTRIES, INC. OF TULSA OKLAHOMA OR EQUIVALENT. THE CONTRACTOR MIGHT HAVE TO BUILD THE FOUNDATION WITH SUBMERGED CONDITIONS AND SHALL MOBILIZE ACCORDINGLY. 9. GROUND ROD: 5/8" X 8-FEET (MINIMUM LENGTH) STEEL WITH PURE COPPER JACKET NOT LESS THAN 0.0012 INCHES THICK. GROUND RODS SHALL BE SPACED NO GREATER THAN 15 FT. O.C. AND NO LESS THAN 6 FT. O. 9. GROLING ROD. 58" X 9-FET (MINIMUM LENGTH) STEEL WITH PURE COPPER JACKET NOT LESS THAN 0.07 LESS THAN 0.07 LESS CHAND OR GEATER THAN 1.0FT, O.C. AND NO LESS THAN 6.FT, O.C. 11. GROUND ROD COUPHING: 58" GROUND ROD COUPHING MADE OF THE SAME MATERIAL AS THE GROUND ROD TO PREVENT DISSIMILAR METAL HIGH OXIDATION POINTS. 11. CHEMICAL GROUND ROD. COMPRISED OF A HOLLOW COPPER GROUND ROD, A GROUND TEST WELL A 4-0" EXCHITEMENTALLY WILDED PIGTAL, AND CONDUCTIVE BACKFLL MATERIAL. THE CHEMICAL GROUND ELECTRODE SHALL BE MADE OF A MINIMUM OF 2-WINH LD. TYPE K COPPER TUBE WITH A MINIMUM WILL THICKNESS OF 0.083 NICH AND SHALL BE A INMINIMUM OF 9-FET IN LENGTH. THE CHEMICAL GROUND ROD SHALL BE COUPARE. WHITH PIGE LINEST HIS PROPERTY OF THE COMPANY OF THE TOTAL CHEMICAL GROUND ROD SHALL BE COUPARE. WHITH 1.981 NICH, BASS SHALL BE A LOCUPARE WHITH 1.981 NICH, BASS SHALL BE A LOCUPARE WHITH 1.981 NICH AND SHALL BE MADE OF A MINIMUM OF 2-WINH THE PIGE LINEST AND SHALL BE A COUPARE WHITH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH THE PIGE LINEST AND SHALL BE A COUPARE WHITH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM SHALL BE MADE OF A MINIMUM SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A MINIMUM OF 2-WINH 1.981 NICH BASS SHALL BE MADE OF A WINH 1.981 NICH BASS SHALL BE MADE OF A WINH 1.981 N ALL EXISTING GROUNDING RINGS AND DEVICES EXPOSED BY EXCAVATION OR REGRADING SHALL BE REPLACED AND PROPERLY CONNECTED TO EXISTING SYSTEM PER NEC OR LOCAL JURISDICTION REQUIREMENTS. CONCRETE COVER FROM TOP OF FOUNDATION TO ENDS OF VERTICAL REINFORCEMENT SHALL NOT EXCEED 3 INCHES (76 MM) NOR BE LESS THAN 2 INCHES (51 MM). SPACERS SHALL BE ATTACHED INTERMITTENTLY THROUGHOUT THE ENTIRE LENGTH OF VERTICAL REINFORCING CAGES TO INSURE CONCENTRIC PLACEMENT OF CAGES IN EXCAVATION DINDATION DESIGN MODIFICATIONS MAY BE REQUIRED IN THE EVENT OF THE FOLLOWING DESIGN PARAMETERS ARE NOT APPLICABLE FOR THE SUBSURFACE CONDITIONS ENCOUNTERED. R FOUNDATION AND ANCHOR TOLERANCES REFER TO TOWER MANUFACTURER DRAWINGS FOR SPECIFIC JOB NUMBER AND DATE. IN ABSENCE OF MORE SPECIFIC INFORMATION, THE CONTRACTOR MAY USE THE FOLLI 13. INSULATORS: POLYESTER FIBERGLASS, 15 KV MINIMUM DIELECTRIC STRENGTH, FLAME RESISTANT PER UL 94 VO CLASSIFICATION. 14. CUPS: WHEN SECURING ANY GROUND WIRES, SOLID OR STRANDED, INSULATED OR UNINSULATED, NEVER USE ANY CUPS OR OTHER DEVICES THAT ARE CONDUCTIVE AND FORM A CLOSED LOOP. METALLIC CLIPS ARE ACCEPTABLE IF THEY DO NOT FORM A CLOSED LOOP 15. GROUND CLAMP: BURNDY GAR STYLE UL CLAMP WITH TWO-HOLE PROVISIONS FOR LONG BARREL MULTIPLE CRIMP TWO-HOLE LUGS. -OUT OF PLUMB: 1.5% OF SHAFT LENGTH NOT TO EXCEED 12.5% OF SHAFT DIAMETER OR 12\* 6. COAX GROUNDING KIT: COAX GROUND KITS SHALL BE FROM THE SAME MANUFACTURER AS THE COAX. GROUND KITS SHALL BE SOLID STRAP TYPE WITH NO. 6 AWG WIRE AND 2-HOLE COMPRESSION CRIMPED LUGS (INSTALLED USING THE PROPER UL TOOL AND CIRCUMFERENTIAL HEXAGON DIE). BRAND OR HOSE CLAMP TYPE SHALL NOT BE USED. ALL COAX CABLES ARE TO 8E GROUNDED AT THEIR SECTOR COE, IMPOINT COB, IMP 19. ANTENNA GROUNDING - ALL ANTENNAS (INCLUDING THE GPS ANTENNAS) ARE GROUNDED BY THEIR MOUNTSIMASTS AND BY THE ROQUING INTO ON THE COAXIAL CABLE CONNECTED TO THE COAX GROUND BARS. DO NOT INSTALL SEPARATE ANTENNAS GROUND CONNECTIONS UNLESS SPECIFIED BY THE ANTENNAS MANUFACTURER. THE GPS ANTENNAS INSTITE BY ENTALLED AND CONNECTED TO THE COAX GROUND FOR THE WAVEGUIDE BRIDGE. ANTENINAS MANUFACTURER. THE GPS ANTENINAS) MUST BE INSTALLED AND CONNECTED TO THE COAX GROUND BAR AT THE END OF THE WAVEGUETED REPORTS. ANTENINAS MANUFACTURER. THE GPS ANTENINAS MAD BETTS KOPENSHEDID (THO FET LUBE, INC.) OR BUFFERDY. E. ANTENINAS MANUFACTURER. THE GPS ANTENINAS MAD BETTS KOPENSHEDID (THO FET LUBE, INC.) OR BUFFERDY. E. ANTENINAS MANUFACTURER. ACTOR SHALL PROVIDE ALL LABOR. MATERIALS. INSURANCE, EQUIPMENT, TRANSPORTATION, CONSTRUCTION TOOLS, ETC. FOR THE INSTALLATION OF COMPLETE AND PROPERLY OPERATING SYSTEMS. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LAWS AND ORDINANCES OF ALL AUTHORITIES HAVING JURISDICTION AND WITH ALL ASSOCIATED UTILITY COMPANY REGULATIONS AND APPLICABLE REQUIREMENTS. INSTALLATION WILL ALSO COMPLY WITH THE LATEST EDITIONS OF ALL CODES AND STANDARDS OF THE ENTITIES LISTED UNDER ITEM #1.1, PARAGRAPH 1. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS. THE CONTRACTOR SHALL SECURE ALL NECESSARY ELECTRICAL PERMITS AND PAY ALL REQUIRED FEES. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DOCUMENTS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT ALL BROCHURES, OFERATION MANUAS, CATALOSS, SHOP DRAWINGS, SPECIFICATIONS, ETC., SHALL BE TURNED OVER TO THE CARRIER AT THE COMPLETION OF THE PROJECT. ALL BROCHURES, OFERATION MANUAS, CATALOSS, SHOP DRAWINGS, SPECIFICATIONS, ETC., SHALL BE TURNED OVER TO THE CARRIER AT THE COMPLETION OF THE PROJECT. BEGINNING THE WARRANTE WARRANTE BUSTALLATION TO BE FREE OF DEFECTS, SHORTS, GROUND, ETC., FOR A PERIOD OF ONLY SEAR. FURNISH WARRANTY SO THE DEFECTIVE MATERIAL ANDION WORMANSHIP WILL BE REPAIRED.REPLACED IMMEDITION. TO SHOP THE PROJECT OF THE WORK AND A PROJECT THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES, AS NECESSARY. O NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER OF THAT SERVICE AND WRITTEN PERMISSION OF THIS INSTALLATION'S CARRIES COAXIAL CABLE TYPE AND DIAMETER SHALL BE VERIFIED WITH CARRIER. CHANGES: NO ADDITIONAL COSTS FOR LABOR OR MATERIALS WILL BE ALLOWED FOR CHANGES OR MICIDIFICATIONS MADE UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ARCHITECT, ENGINEER OR OWNER IN THE FORM OF A CH. DRAWINGS: ELECTRICAL DRAWINGS AND ED DIGITALISM ON NATURE AND ARE NOT TO BE SCALED. DIGGREPHANGES INSCREPANCES ON THESE PLANS, SEPECIFICATIONS, ETC. MUST BE MIREDATELY BROUGHT TO THE ATTENTION OF THE ENGINEER. COAVAL CABLES SHALL BE LABELED IN ACCORDANCE WITH CARRIER ELECTRICAL MATERIALS AND METHODS SPECIFICATIONS. ALL MAIN CABLES WILL BE COLOR CODED AT FOUR LOCATIONS: A) AT ANTENNA PRIOR TO JUMPER, B) AT THE BOTTOM OF THE TOWER, C) EXTERIOR PART OF THE WAVE ENTITY OF THE WAVE ENTITY OF THE SHELT EXCASINET. INSTALL CONNECTIONS TO COAVAL CABLE AT BOTH ENGING METHEN AND MOST SIL COATION). UPON SUCCESSFUL COMPLETION OF THE SWEEP TEST, THE CONTRACTOR SHALL PROVIDE A WEATHERTIGHT SEAL ON THE COAX CABLES AT THE ANTENNA CONNECTION ONLY. SURVEY AND CONDITIONS. VISIT THE JOB SITE PRIOR TO SUBMITTING BID, AND MAKE A SURVEY OF EXISTING CONDITIONS WHICH MAY AFFECT THE WORK TO BE PERFORMED. NO OTHER ALLOWANCES WILL BE GIVEN FOR THE SITE CONDITION. CO-OPERATION: CO-OPERATE WITH OTHER CONTRACTORS AND SUBCONTRACTORS ON SITE ARRANGE AND EXECUTE WORK IN SUCH A MANNER AS REQUIRED FOR THE SATISFACTORY AND EFFICIENT CONSTRUCTION OF THIS PROJECT BY ALL TRADES CONCERNED. THE MINIMUM BENDING RADIUS FOR ALL ANTENNA CABLES SHALL BE AS SHOWN BELOW OR PER THE MANUFACTURER, WHICHEVER IS MORE OF CABLE IN AIR OR CABLE TRAY INSTALLATION SHALL COMPLY SPECIFICALLY WITH ENGINEERING STANDARDS MANUAL ANY DEVIATIONS SHALL BE REQUIRED TO THE ATTENTION OF THE PROJECT MANAGER PRIOR TO COMMENCEMENT OF WORK

CUREMENT VERIFICATION. PROVIDE AN ITEMAZE CERTIFICATION TO THE PROJECT MANAGER THAT EQUIPMENT AND RELATED HARDWARE HAVE BEEN ORDERED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED INCOMENS. PROVIDED WITHIN 24 HOURS OF NOTICE TO PROCEED W

MISCELLANEOUS SUPPORTS: PROVIDE ANY ADDITIONAL STRUCTURAL SUPPORT STEEL BRACKETS, ANGLES, FASTENERS AND HARDWARE AS REQUIRED TO ADEQUATELY SUPPORT ALL ELECTRICAL MATERIALS AND EQUIPMEN

NSPECTIONS REQUIRED: AS PER THE LAWS AND REGULATIONS OF THE LOCAL AND/OR STATE AGENCIES HAVING JURISDICTION AT THE PROJECT SITE.

SPECTIONS AGENCY: APPROVED BY THE LOCAL AND/OR STATE AGENCIES HAVING JURISDICTION AT THE PROJECT SITE

PES: HANGERS, STRAPS, RISER SUPPORTS, CLAMPS, U-CHANNEL, THREADED RODS, ETC., AS INDICATED OR REQUIRE

STRUCTURAL MEMBERS: DO NOT CUT, DRILL OR WELD ANY STRUCTURAL MEMBER EXCEPT AS SPECIFICALLY APPROVED BY THE ENGINEER.

ERTIFICATES: SUBMIT ALL REQUIRED INSPECTION CORTICATES TO THE CARRIER AND UTILITY.

ONE-HOLE STRAPS SHALL NOT BE USED FOR CONDUITS LARGER THAN 1/4 INCH

G AND UPON COMPLETION OF WORK, ARRANGE AND PAY ALL ASSOCIATED INSPECTIONS OF ALL ELECTRICAL WORK INSTALLED UNDER THIS CONTRACT IN ACCORDANCE WITH THE CONDITIONS OF THE CONTRACT.

HANGERS AND SUPPORTS

(ATFRIA) S: ALL HANGERS, SUPPORTS, FASTENERS AND HARDWARE SHALL BE ZINC COATED OR OF EQUIVALENT CORROSION RESISTANCE BY TREATMENT OR INHERENT PROPERTY AND SHALL BE MANUFACTURED PRODUCTS DESIGNED FOR THE APPLICATION, PRODUCTS FOR OUTCOME.

NSTALLATION: RIGIDLY SUPPORT AND SECURE ALL MATERIAL, RACEWAY AND EQUIPMENT TO BUILDING STRUCTURE USING HANGERS, SUPPORTS AND FASTENERS SUITABLE FOR THE USE ON MATERIALS AND LOADS ENCOUNTERED, PROVIDE ALL NECESSARY HARDWARE, PROVIDE CONDUIT SUPPORTS AT

44 ENLOGUESEMENTALS

14 ENLOGUESEMENTALS

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16 ENLOGUESEMENTALS

17 ENLOGUESEMENTALS

18 ENLOGU 2 WIREWAYS SHALL RE FPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER AND RATE NEMA 1 (OR RETTER) INDOORS OR NEMA 3R (OR RETTER) OLITHOORS 3. JUNCTION BOXES: JUNCTION BOXES SHALL BE A MINIMUM SIZE OF 4 INCHES SQUARE BY 1-1/4 INCHES DEEI 6.5 HOLES, SLEEVES AND OPENINGS 1. GENERAL: PROVIDE ALL HOLES, SLEEVES AND OPENINGS REQUIRED FOR THE COMPLETION OF WORK AND RESTORE ALL DAMAGED SURFACES TO MATCH SURROUNDING SURFACES. 2. CONDUIT PENETRATIONS: SIZE CORE-DRILLED HOLES SO THAT AN ANNULAR SPACE OF NOT LESS THAN ½ INCH AND NOT MORE THAN 1 INCH IS LEFT AROUND THE CONDUIT, PIPE, ETC. WHEN OPENINGS ARE CUT IN LIEU OF CORE-DRILLED, PROVIDE SLEEVE IN ROUGH OPENING. SIZE SLEEVES TO PROVIDE AN ANNULAR SPACE OF NOT LESS THAN ½ INCH AND NOT MORE THAN 1 INCH AROUND THE CONDUIT, PIPE, ETC. PATCH AROUND SLEEVE TO MATCH SURROUNDING SURFACE. 3. PROVIDE APPROPRIATE WEATHERPROOFING MATERIALS FOR PENETRATIONS NEEDING TO BE SEALED FROM POTENTIAL WATER INTRUSION, PROVIDE FIREPROOF MATERIALS FOR PENETRATIONS REQUIRING A FIRE RATED SEAL. REFER TO CUTTING AND PATCHING NOTES UNDER SECTION 1 - GENERAL 4. IF ANY ROOFTOP WORK IS TO BE PERFORMED, THE CONTRACTOR SHALL USE THE BUILDING OWNERS APPROVED ROOFING CONTRACTOR TO PREVENT VOIDING ANY EXISTING ROOFING WARRANTIES. ANY DAMAGE TO THE EXISTING ROOFING MEMBRANE SHALL BE REPAIRED IMMEDIATELY WAS INCIDENT OF THE EVILLING SHELL. 5. GENERAL: PROVIDE ALL CUTTING, DRILLING, FITTING AND PATCHING NECESSARY FOR ACCOMPLISHING THE WORK. THIS INCLUDES REMOVAL AND REPLACEMENT OF DEFECTIVE WORK AND WORK NOT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS 6. REPAIRS: REPAIR ANY AND ALL DAMAGE TO WORK OF OTHER TRADES CAUSED BY CUTTING AND PATCHING OPERATIONS, USING SKILLED MECHANICS OF THE TRADES INVOLVED 7. DO NOT CUIT MAJOR STRUCTURAL ELEMENTS WITHOUT APPROVAL PATCHING SHALL BE OF QUALITY EQUAL TO AND OF MATCHING APPEARANCE OF EXISTING CONSTRUCTION 8. ABSOLUTELY NO FIELD CORING / DRILLING / CUITING OF METALLIC POLES TO BE ALLOWED. 66 COMPLICATES
1. USE 98S. COMPLICATION FOR WIRE LARGER THAN NO. 8 AWG. USE PRESSURE-TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG.
AND SMALLER, SOLDERLESS MECHANICAL TERMINAL LIUGS FOR NO. 8 AWG. AND LARGER ALUMINUM CONDUCTORS SHALL NOT BE USED. 2. NO BX, MC OR ROMEX CABLE SHALL BE PERMITTED. 3. EACH END OF EVERY POWER, GROUNDING AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-COCED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA AND MATCH EXISTING INSULATION REQUIREMENTS. 4. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL. REMOVE SHARP EDGES 5. ALL CONDUIT SIZES SPECIFIED IN THIS DOCUMENT WERE DONE TAKING INTO ACCOUNT THE USE OF COPPER CONDUCTORS. 6.7 <u>ELECTRICAL SERVICE</u>

 GENERAL: COMPLY WITH AND CO-ORDINATE ALL REQUIREMENTS OF THE UTILITY COMPANY. 2. SHORT CIRCUIT RATINGS: PROVIDE EQUIPMENT WITH HIGHER FAULT CURRENT RATINGS AS NEEDED TO MATCH UTILITY COMPANY AVAILABLE FAULT CURRENT 3 CONTRACTOR TO VERIFY LITH ITY CO FAULT CURRENT AND ENSURE THAT ALL FOLIPMENT MEETS FAULT CURRENT (AT A MINIMUM ALL FOLIPMENT TO BE 10 000 AC) 3. COUNTAGE ON TO SERVICE SERVICE OF THE SERVICE OF 8. PANEL AND DISTRIBUTION BOARD IDENTIFICATION: SWITCHBOARDS, PANELBOARDS, TRANSFORMERS AND DISTRIBUTION SECTIONS SHALL BE IDENTIFIED WITH ENGRAVED, WHITE ON BLACK, LAMINATED, RIGID PHENOLIC NAMEPLATES WITH 1/2 INCH CHARACTERS, SECURELY AFFIXED TO FACE OF CABINET. 6.11 <u>EQUIPMENT</u>

1. THE MAIN CIRCUIT BREAKER SHALL BE RATED FOR STANDARD A.I.C. RATING HIGHER THAN INCOMING EQUIPMENT A.I.C. 2. ALL EQUIPMENT SHALL BE BRACED FOR STANDARD ALC. RATING HIGHER THAN INCOMING FROM UTLITY OF ALL STANDARD ALC. RATING HIGHER THAN LOCKING FROM UTLITY OF A 3. THE CONTRACTOR SHALL PROVIDE AN ITEMIZED CERTIFICATION TO THE CARRIER OF ALL EQUIPMENT AND RELATED HAR

IN CONDUIT

8.2 ANTENNA REQUIREMENTS:

1. AZIMUTHS ARE ORIENTED CLOCKWISE FROM TRUE NORTH.

LLED WITH THE MINIMUM NUMBER OF BENDS. CABLE SHALL NOT BE LEFT UNTERMINATED IN THE FIELD.

6.8 CHECKOUT. TESTING AND ADJUSTING
1. CORRECTION/REPLACEMENT: AFTER TESTING BY CONTRACTOR, OWNER OR ENGINEER, CORRECT ANY DEFICIENCIES AND REPLACE MATERIALS AND EQUIPMENT SHOWN TO BE DEFECTIVE OR UNABLE TO PERFORM AT DESIGN OR RATED CAPACIT 2. POWER CONDUCTORS: CONTRACTOR SHALL CONDUCT A CONTINUITY AND INSULATION TEST ON CONDUCTORS BETWEEN SERVICE DISCONNECT SWITCH AND LOAD CENTER.

3. WHEN SITE POWER IS DERIVED FROM A 3-PHASE SOURCE, LOAD READINGS WILL BE TAKEN AND RECORDED TO MAINTAIN A BALANCED LOAD AT THE PRIMARY SOURCE. RECORDS SHALL BE RETURNED TO THE OWNER'S REPRESENTATIVE. 69 <u>RECENSE SYSTEMSCONDUT</u>

1. PLACEMENDA WE STEED AS A RECORD OF THE ASSECUTION OF BETTER AS REQUIRED BY LOCAL JURISDICTION AND/OR UTILITY. UNDERGROUND PVC CONDUIT SHALL TRANSITION TO RIGID GALVANIZED STEEL CONDUIT OR SCHEDULE 80 PVC CONDUIT SHALL SERVICE AS A RECORD OR STEEL CONDUIT OR SCHEDULE 80 PVC CONDUIT SHALL SERVICE AS A RECORD OR SCHEDULE 80 PVC CONDUIT SHALL SERVICE AS A RECORD OR STEEL CONDUIT SHALL BE REGID GALVANIZED STEEL (RSG) CONDUIT OR SCHEDULE 80 PVC CONDUIT SHALL SERVICE AS A RECORD O P F STAMP ARFA: 4. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (RIGID PVC SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS. 5 LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS WHERE VIRRATION OCCURS OR FLEXIBILITY IS NEEDED. 6. PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS - 200 LB. TEST POLYETHYLENE COI 6.PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS - 200 LB. TEST POLYETHYLENE CORD.
7. ALL CONDUIT BENDS SHALL BE MINIMUM OF 24-INCH RADIUS.
8. ALL METALLIC PACEWAYS SHALL BE GROUNDED PER INC.
9. THE CONTRACTOR SHALL FIELD VERIFY THE BEST AND LEAST DISRUPTIVE ROUTING OF CONDUITS. CABLE TRAYS AND DUCTS. CONDUIT ROUTING IS SHOWN AS A GUIDE ONLY, ACTUAL CONDUIT PLACEMENT IS TO BE DONE IN A PROFESSIONAL MANNER. 2. PRIOR TO EXCAVATION, A UTILITY MARK OUT SHALL BE DONE TO LOCATE EXISTING UNDERGROUND UTILITIES. ALL UNDERGROUND UTILITIES MUST BE LOCATED AND MARKED OUT PRIOR TO ANY EXCAVATION WORK BEING PERFORMED. PHOTOS SHALL BE TAKEN OF ALL UNDERGROUND WORK AND GIVEN TO THE OWNER OR OWNERS REPRESENTATIVE DURING THE SITE'S HANDOFF. 3. ALL TRENCHING AND EXCAVATION WITHIN EXISTING COMPOUNDS MUST BE PERFORMED BY HAND IN ACCORDANCE WITH THE OWNER'S SPECIFICATIONS. ANY OTHER METHODS OF DIGGING MUST FIRST BE APPROVED BY THE CONSTRUCTION MANAGER 4. ALL LOW VOLTAGE CONDUIT (600V OR LESS) SHALL HAVE A MINIMUM BURIAL DEPTH OF 24". ALL HIGH VOLTAGE CONDUIT (600V OR MORE) SHALL HAVE A MINIMUM BURIAL DEPTH OF 36" S. UNDERGROUND CONDUIT SHALL BE ENCASED IN REINFORCED CONCRETE IN AREAS OF VEHICLE TRAFFIC. CONCRETE ENCASEMENT SHALL BE 3" MINIMUM ALL AROUND AND BETWEEN CONDUITS 4. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH ITS VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR CAPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (I.E. PANELBOARD AND CIRCUIT 5. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING: SHALL MEET OR EXCEED UL 51A AND NEMA OS 1, AND BE RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER 6. NONMETALLIC RECEPTACLE SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA 05 2, AND BE RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER-PROTECTED (WP OR BETTER) OUTDOORS. 6.12 TRANSIENT VOLTAGE SURGE SUPPRESSION (TVSS)

1. TVSS DEVICES FOR AP DVWER SHALL BE INSTALLED IN ALL EXISTING FACILITIES THAT ARE MISSING TVSS DEVICES OR HAVE UNSUITABLE TVSS DEVICES.

2. THEA OF POWER COMINON MODE SURGE SUPPRESSOR SHALL BE CONNECTED TO THE COMMERCIAL POWER INPUT SIDE OF THE MANUAL TRANSFER SWITCH.

3. IN MARKETS WITH LIGHTNING ZONE > OR \* TO 4, RF TVSS DEVICE SHALL BE INSTALLED AT THE ENTRANCE TO THE SHELTER OR AS CLOSE AS POSSIBLE TO THE BTS CABINET FOR OUTDOOR SITES, TO PROTECT AGAINST LIGHTNING AND TRANSIENT VOLTAGES. 4. A T1 TRANSPORT TVSS DEVICE SHALL BE INSTALLED AT ALL SITES BETWEEN THE NTU AND THE BTS. 7 GROUNDING
7 GROUNDING MATERIALS AND NOTE
7 GENERAL GROUNDING MATERIALS AND NOTE
7 GENERAL GROUNDING MATERIALS AND NOTE
8 G 2. ALL DETAILS SHOWN ARE DIAGRAMMATICAL, ACTUAL GROUNDING INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS. LICINES SHOWN ARE UNRIGHEDWINDHING TO A LICENTARY OF THE CONTROL OF THE PROPERTY OF THE CONTROL OF THE PROPERTY OF THE CONTROL OF THE PROPERTY OF THE CONTROL OF THE CONTRO 5. GROUND WIRE: OUTSIDE/UNDERGROUND, MINIMUM NO. 2 AMERICAN WIRE GAUGE (AWG) BARE, SOLID, ANNEALED, TINNED COPPER WIRE (BTCW) BUT SIZED IN ACCORDANCE WITH NEC TABLE 250.68, SERVICE SIZE, AND LOCAL UTILITY REQUIREMENTS. UNDER NO CIRCUMSTANCES IS STRANDED WIRE ACCEPTABLE. ALL BURIED WIRE SHALL BE INSTALLED TO MEET MINIMUM BEND RADIUS. SHARP BENDS AND KINKS ARE NEVER ACCEPTABLE. WHEN ANY GROUNDING OR BONDING WIRE RUNS THROUGH CONCRETE, IT SHALL BE SLEEVED IN PVC. GROUND WIRES SHALL NOT BE INSTALLED OR ROUTED THROUGH HOLDER ANY METAL DECERTOR SUPPORTS.

INDERT, AND IMATERIALS RECESSARY FOR RECEIVING, INSTALLING, TESTING, AND ADJISTING ANTENINA CABLES FROM THE ANTENINA TO THE CONNECTIONS AT THE BASE TRANSMISSION SYSTEM (BTS), THIS SHALL INCLUDE ALL EQUIPMENT SHOW.

THEN ALTERIALS, COUNCETORS, AND FITTING SHALL BE THIRD PARTY PURINSHED COMPONENTS AS SHOWN ON THE BILL OF MATERIALS.

A. GROUNDING KITS - AFTER INSTALLATION OF GROUND STRAPS, THE CONNECTIONS SHALL BE MADE WEATHER TIGHT USING WEATHERPROOF KITS AS IDENTIFIED. GROUND PIGTALS SHALL BE BROUGHT OUT IN THE DOWNWARD DIRECTION FROM THE CONNECTION SHALL BE MADE TO GROUNDING SYSTEM.

■ PLANS PREPARED FOR: extenet - PLANS PREPARED BY: •

UC/SYNERGETIC MANSFIELD, MA 02048 1-508-337-7600 www.ucseng.com

**CHARLES ST** BOSTON, MA 02108 SUFFOLK COUNTY

DRAWING NOTES: -

ORIGINAL PLAN: AS NOTED DRAWN BY PLAN ORIG. DATE: 3/4/19 - REVISIONS

DAT REV DESCRIPTION

LAT: 42.35568726° LONG: -71.06930476° CRAN ID: CRAN\_RCTB\_2HA4\_092B

EXTENET NODE ID:

NE-MA-BSTBSC01-00092B

ITE ADDRESS

CCC

SHEET TITLE: GENERAL NOTES

SHEET NUMBER:

GN-2