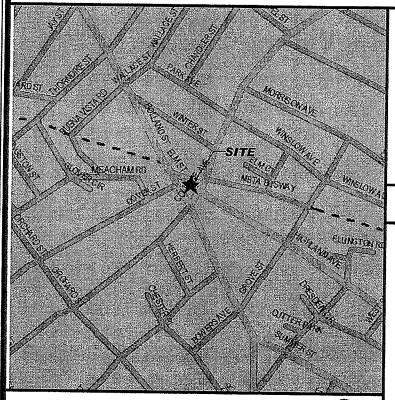
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SOMERVILLE THEATER MA-BOS5902-A / BS58XC001-A49 DAVIS SQUARE SOMERVILLE, MA 02143



VICINITY MAP (NOT TO SCALE)



1-93 SOUTH TOWARD BOSTON. TAKE EXIT #31/RT-16 EAST ONTO MYSTIC VALLEY I-93 SOUTH TOWARD BOSTON. TAKE EXIT #31/KI-TID EAST UNIO MISTIC VALLET PKY[RI-16] TOWARD REVERE - CONTINUE ON HARVARD STREET - HARVARD STREET BECOMES WARNER STREET - CONTINUE ON COLLEGE AVENUE AT POWDER HOUSE SQUARE - TURN ON ELM STREET - TURN ON GROVE STREEY - TURN ON HIGHLAND AVENUE - CONTINUE ON DAVIS SQUARE ARRIVE AT 49 DAVIS SQUARE SOMERVILLE.

- THIS IS AN UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF BTS EQUIPMENT, BH & PANEL ANTENNAS
- 2. SIGNALS FROM THE ANTENNA SHALL NOT INTERFERE WITH ANY EXISTING COMMUNICATION SITES. ALL ITEMS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED.
- 3. THIS IS AN UNMANNED FACILITY NO SOLID WASTE. THE SITE WILL CREATE NO TRASH, THUS REQUIRES NO DUMPSTER.
- DEVELOPMENT AND USE OF THE SITE WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.
- 5. EMERGENCY POWER SUPPLY IS A CELL PACK BATTERY SOURCE AND NOT A FLAMMABLE LIQUID SOURCE.

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES.

CODE COMPLIANCE

- 1. MASSACHUSETTS STATE BUILDING CODE
   7TH EDITION
- 2. NEC 2008

	SHEET	DESCRIPTION		
	T-1	TITLE SHEET		
	G-1	GENERAL NOTES		
	C-1	ABUTTERS MAP		
	A-1	ROOF TOP PLAN & EQUIPMENT ROOM LAYOUT		
	A-2	WEST ELEVATION		
	A-3	EAST & SOUTH ELEVATIONS		
A-4 CONSTRUCTION DETAILS				
1	A5	CABINET DETAILS		
	S-1	STRUCTURAL DETAILS I		
ı	S-2	STRUCTURAL DETAILS II		
ı	S-3	STRUCTURAL DETAILS III		
	E-1	ELECTRICAL & GROUNDING SCHEMATIC		

SHEET INDEX

**UNDERGROUND** 

SERVICE ALERT

**CALL TOLL FREE** 

1-888-DIG-SAFE

THREE WORKING DAYS BEFORE YOU DIG

#### PROJECT DESCRIPTION

#### APPLICANT / LESSEE

CLEARWIRE 4400 CARILLON POINT

#### PROPERTY INFORMATION

MSAG:

49 DAVIS SQUARE SOMERVILLE, MA 02143

OWNER:

DBA BF PROPERTIES PO BOX 380286

CAMBRIDGE, MA 02238 BEATRICE FRAIMAN P: 617-354-4466

CURRENT ZONING:

COMMERCIAL-INDUSTRIAL

STRUCTURE TYPE:

ROOF TOP ANTENNAS & INTERIOR EQUIPMENT ROOM

COORDINATES: GROUND ELEVATION:

LATITUDE: N 42" 23' 48.55" LONGITUDE: W 71° 07.' 23.53"

HANDICAP REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED

#### CONSULTANTS:

MAXTON TECHNOLOGY, INC. 241 BOSTON POST RD WEST MARLBOROUGH, MA 01752

PHONE: 508-229-4100 FAX: 508-485-5321

BAY STATE DESIGN, INC. ARCHITECTS . ENGINEERS

241 BOSTON POST RD WEST MARLBOROUGH, MA 01752

PHONE: 508-229-4100 508-485-5321

LOCAL POWER COMPANY: NSTAR

LOCAL TELCO COMPANY: VERIZON

#### DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE

# clearw're

4400 CARILLON POINT KIRKLAND, WA 98033



241 Boston Post Rd. West Phone: 508-229-4100 Mariborough, MA. 01752 Fox: 508-485-5321

SOMERVILLE THEATER

BS58XC001-A

MA-BOS5902-A

#### CONSTRUCTION DWG'S

_							
_	4	05/07/10	PER COMMENTS				
	3	11/24/09	PER COMMENTS				
	2	11/18/09	PER COMMENTS				
	1	10/21/09	PER COMMENTS				
	0	10/09/09	FOR CONSTRUCTION				
	Α	06/16/09	ISSUE FOR REVIEW				

THOFMA IVAN B FILEV STRUCTURAL No. 48078

CHECKED BY: JT/GG

J0B **∦**:

SITE ADDRESS:

49 DAVIS SQUARE SOMERVILLE, MA 02143

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1

PROJECT SUMMARY

PROJECT TEAM

GEN. CONTRACTOR NOTES

DRIVING DIRECTIONS

#### GENERAL NOTES

#### 1. GENERAL

- EXAMINE THE SITE CONDITIONS VERY CAREFULLY AND THE SCOPE OF PROPOSED WORK TOGETHER WITH THE WORK OF ALL OTHER TRADES AND INCLUDE IN THE BID PRICE ALL COSTS FOR WORK SUCH AS EQUIPMENT AND WIRING MADE NECESSARY TO ACCOMMODATE THE SYSTEMS SHOWN AND SYSTEMS OF OTHER TRADES.
- SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
- PERFORM DETAILED VERIFICATION OF WORK PRIOR TO ORDERING THE EQUIPMENT AND COMMENCING CONSTRUCTION. ISSUE A WRITTEN NOTICE TO THE CONSULTANT OF ANY DISCREPANCIES.
- 4. OBTAIN ALL PERMITS, PAY ASSOCIATED FEES AND SCHEDULE INSPECTION.
- 5. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, INSURANCE AND SERVICES TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND PRESENT IT AS FULLY OPERATIONAL TO THE SATISFACTION OF THE
- CARRY OUT WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
- PRIOR TO BEGINNING WORK COORDINATE ALL POWER AND TELCO WORK WITH THE LOCAL UTILITY COMPANY AS IT MAY APPLY TO THIS SITE. ALL WORK TO COMPLY WITH THE RULES AND REGULATIONS OF THE UTILITIES INVOLVED.
- B. FABRICATION AND INSTALLATION OF THE COMPLETE ELECTRICAL SYSTEM SHALL BE DONE IN A FIRST CLASS WORKMANSHIP PER NECA STANDARD 1-2000 BY QUALIFIED PERSONNEL EXPERIENCED IN SUCH WORK AND SHALL SCHEDULE THE WORK IN AN ORDERLY MANNER SO AS NOT TO IMPEDE PROGRESS OF THE PROJECT.
- 9. DURING PROGRESS OF THE WORK, MAINTAIN AN ACCURATE RECORD OF THE INSTALLATION OF THE SYSTEMS, LOCATING EACH CIRCUIT PRECISELY AND DIMENSIONING EQUIPMENT, CONDUIT AND CABLE LOCATIONS. UPON COMPLETION OF THE INSTALLATION, TRANSFER ALL RECORD DATA TO BLACK LINE PRINTS OF THE ORIGINAL DRAWINGS AND SUBMIT THESE DRAWINGS AS RECORD DRAWINGS TO THE CONSULTANT.
- 10. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL, OR EQUIPMENT FOUND TO BE FAULT DURING THAT PERIOD SHALL BE CORRECTED AT ONCE UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- 11. CONTRACTOR SHALL CONSULT MANUFACTURER'S PLANS, SHOP DRAWINGS AND SPECS FOR INDOOR/OUTDOOR EQUIPMENT LOCATION AND INSTALLATION. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE AREAS ONLY.
- 12. COORDINATE EXACT TELEPHONE REQUIREMENTS AND SERVICE ROUTING WITH LOCAL TELEPHONE SERVICE IMMEDIATELY UPON AWARD OF CONTRACT.
- 2. BASIC MATERIALS AND METHODS
- ALL ELECTRICAL WORK SHALL CONFORM TO THE EDITION OF THE NEC ACCEPTED BY THE LOCAL JURISDICTION AND TO THE APPLICABLE LOCAL CODES AND REGULATIONS.
- 2. ALL MATERIALS AND EQUIPMENT SHALL BE NEW. MATERIALS AND EQUIPMENT SHALL BE THE STANDARD PRODUCTS OF MANUFACTURER'S CURRENT DESIGN. ANY FIRST-CLASS PRODUCT MADE BY A REPUTABLE MANUFACTURER MAY BE USED PROVIDING IT CONFORMS TO THE CONTRACT REQUIREMENTS AND MEETS THE APPROVAL OF THE CONSULTANT AND THE OWNER.
- 3. ARRANGE CONDUIT, WIRING, EQUIPMENT AND OTHER WORK GENERALLY AS SHOWN, PROVIDING PROPER CLEARANCES AND ACCESS. CAREFULLY EXAMINE ALL CONTRACT DRAWINGS AND FIT WHERE DEPARTURES ARE PROPOSED BECAUSE OF FIELD CONDITIONS OR OTHER CAUSES, PREPARE AND SUBMIT DETAILED DRAWINGS FOR ACCEPTANCE.
- 4. THE CONTRACT DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ALL OFFSETS, BENDS, FITTINGS AND ACCESSORIES ARE NOT NECESSARILY SHOWN. PROVIDE ALL SUCH ITEMS AS MAY BE REQUIRED TO FIT THE WORK TO THE CONDITIONS.
- 5. MAINTAIN ALL CLEARANCES AS REQUIRED BY NEC.
- SEAL AROUND CONDUITS AND AROUND CONDUCTORS WITHIN CONDUITS
   ENTERING THE PREFABRICATED SHELTER/CABINETS WHERE PENETRATION OCCURS
   WITH A SILLCOME SEALANT TO PREVENT MOISTURE PENETRATION INTO
- SILICONE SEAL AROUND ALL BOLTS AND SCREWS USED TO SECURE EQUIPMENT TO EXTERIOR OF BUILDING.
- 3. RACEWAYS AND BOXES
- 1. ALL CONDUIT SHALL BE UL LABELED.
- 2. ALL EMPTY CONDUITS INSTALLED FOR FUTURE USE SHALL HAVE A PULL CORD.
- SHEET METAL BOXES SHALL CONFORM TO NEMA OS1; CAST-METAL BOXES SHALL CONFORM TO NEMA B1 AND SHALL BE SIZED IN ACCORDANCE WITH NEC UNLESS NOTED OTHERWISE.

#### 4. GROUNDING

- ALL SAFETY GROUNDING OF THE ELECTRICAL EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT REVISION NEC.
- ALL GROUND LUG AND COMPRESSION CONNECTIONS SHALL BE COATED WITH ANTI-OXIDANT AGENT, SUCH AS NO-OX, NOALOX, PENETROX OR KOPRSHIELD
- 3. GROUND ALL EXPOSED METALLIC OBJECTS ON BUILDING EXTERIOR INCLUDING BUILDING TIE DOWN BRACKETS.
- PROVIDE LOCK WASHERS FOR ALL MECHANICAL CONNECTIONS FOR GROUND CONDUCTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT.
- 5. DO NOT INSTALL GROUND RING OUTSIDE OF PROPERTY LINE.
- REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTIONS, REPAINT TO MATCH AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE.
- 7. ALL EXTERIOR GROUNDING CONDUCTORS INCLUDING EXTERIOR GROUND RING ALL EXTENDOR GROUNDING CONDUCTIONS INCLUDING EXTERIOR GROUND RING SHALL BE #2 AWG SOLID BARE TINNED COPPER UNLESS NOTED OTHERWISE. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. THE RADIUS OF ANY BEND SHALL NOT BE LESS THAN 8" AND THE ANGLE OF ANY BEND SHALL NOT EXCEED 90". GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARD TOWARD THE BURIED GROUND RING.
- BOND ALL EXTERIOR CONDUITS, PIPES AND CYLINDRICAL METALLIC OBJECTS WITH A PENN-UNION GT SERIES CLAMP, BLACKBURN GLV SERIES CLAMP OR A BURNDY GAR 3900BU SERIES CLAMP ONLY. NO SUBSTITUTES ACCEPTED.
- 9. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE METALS BEING
- 10. ALL EXTERNAL GROUND CONNECTIONS SHALL BE EXCITHERMICALLY WELDED. ALL EXOTHERMIC WELDS TO EXTERIOR GROUND RING SHALL BE THE PARALLEL TYPE, EXCEPT FOR THE GROUND RODS WHICH ARE THE EXOTHERMIC WELDS. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY EXCITHERMIC WELDING. USE SPRAY GALVANIZER SUCH AS HOLUB LECTROSOL #15-501.
- 11. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER WHEN THE BURIED GROUND RING IS INSTALLED SO THE REPRESENTATIVE CAN INSPECT THE GROUND RING BEFORE IT IS BACKFILLED WITH SOIL.
- 12. FOR METAL FENCE POST GROUNDINGS, USE A HEAVY DUTY TYPE GROUNDING CLAMP OR EXOTHERMIC WELD CONNECTION TO POST, GROUND ALL FENCE POSTS WITHIN 6' OF EQUIPMENT
- 13. WHERE MECHANICAL CONNECTORS (TWO-HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO OXIDE A" BY DEARBORN CHEMICAL COMPANY ON ALL CONNECTORS.

#### 5. STRUCTURAL NOTES

- DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE MANUAL OF STEEL CONSTRUCTION, 9TH EDITION, BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION AND THE STRUCTURAL WELDING CODE AWS D1.1, LATEST EDITION, BY THE AMERICAN WELDING
- ALL WIDE FLANGE STRUCTURAL SHAPES SHALL BE ASTM A992. ALL CHANNELS, ANGLES, PLATES, BARS AND RODS SHALL BE ASTM A36 UNLESS OTHERWISE NOTED.
- ALL STRUCTURAL PIPES SHALL CONFORM TO ASTM AS3, TYPE E OR S, GRADE B, OR ASTM A 501. STRUCTURAL TUBES SHALL CONFORM TO ASTM A500, GRADE B, Fy =  $46~\rm KSL$
- ANCHOR BOLTS SHALL CONFORM TO ASTM A307 OR ASTM A36 ROD CONFORMING TO ASTM A307.
- 5. ALL WELDING SHALL BE MADE WITH E70XX ELECTRODES IN ACCORDANCE WITH AWS D1.1 AND SHALL BE PERFORMED BY CERTIFIED WELDERS. USE MINIMUM SIZE WELDS PER AISC SPECIFICATION OR AS SHOWN ON DRAWINGS.
- FIELD CONNECTIONS, UNLESS NOTED OTHERWISE, SHALL BE MADE UP WITH 3/4 A325 BOLTS, DESIGNED AS AN 'N' OR BEARING TYPE CONNECTION USING AN ALLOWABLE SHEAR STRESS OF 21.0 KSI. BOLTS SHALL BE TIGHTENED BY TURN OF THE NUT METHOD. WHERE WELDING IS SPECIFIED, WELDING PER NOTE #5 ABOVE SHALL APPLY.
- ALL STEEL EXPOSED TO THE WEATHER SHALL BE HOT-DIPPED GALVANIZED. INTERIOR STEEL SHALL RECEIVE ONE SHOP COAT OF PRIMER AND PAINT.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANAZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIPPED) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED ON THE DRAWINGS.

#### PROJECT INFORMATION

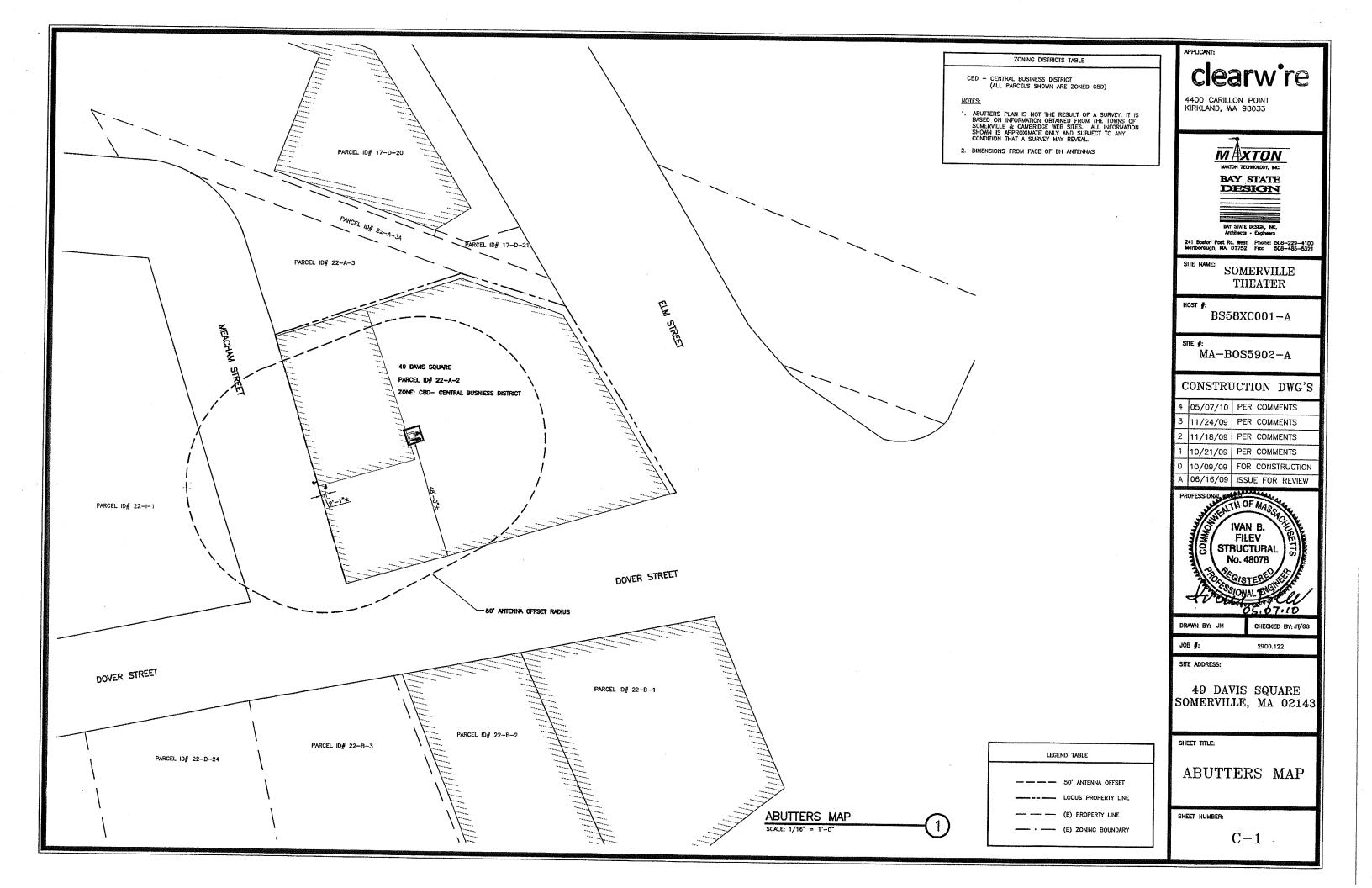
#### 6. COAXIAL ANTENNA CABLE NOTES

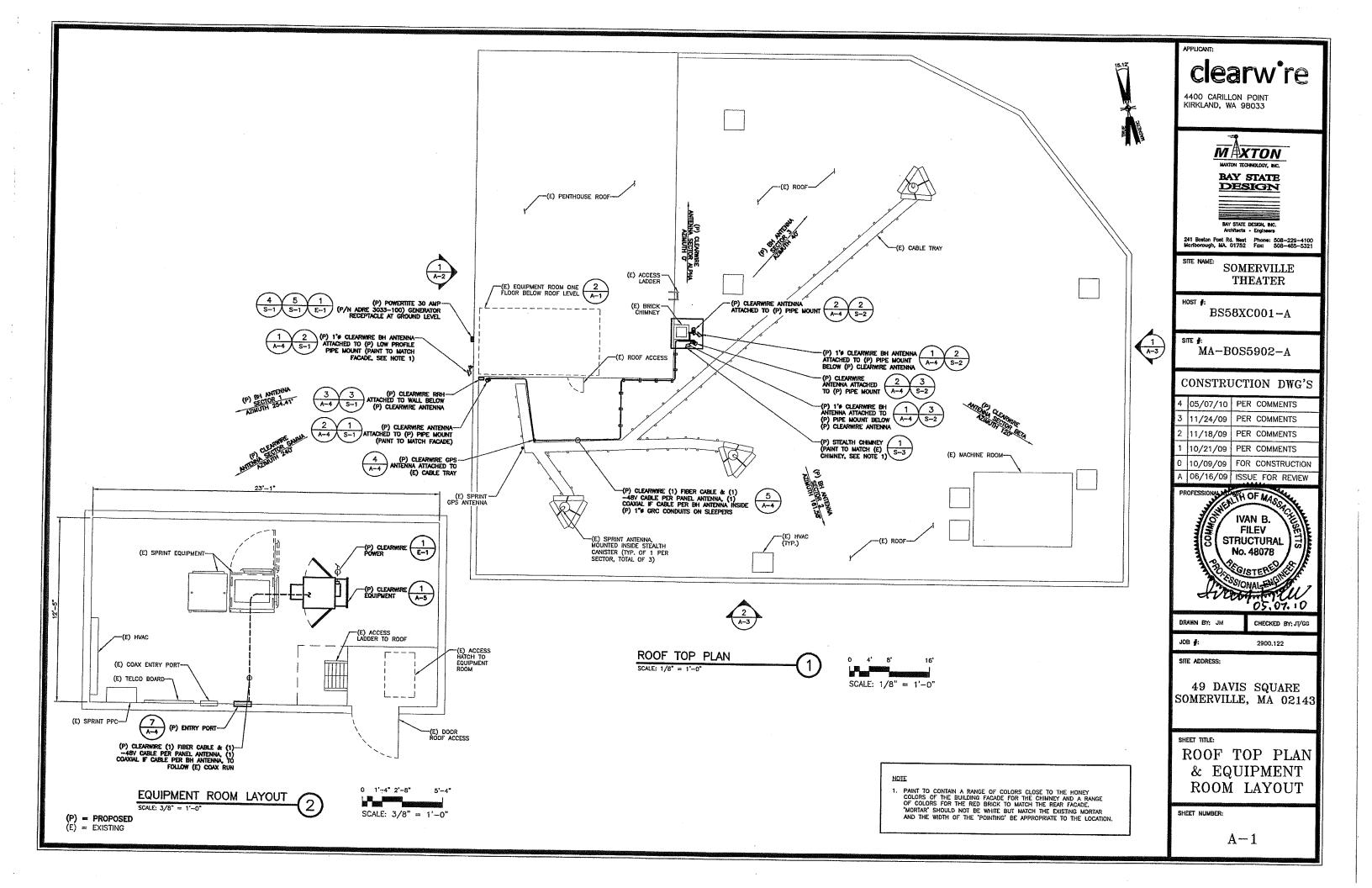
- THE COAXIAL ANTENNA CABLE INSTALLER SHALL BE RESPONSIBLE FOR PERFORMING AND SUPPLYING CLEARWIRE WITH TYPE-WRITTEN SWEEP TESTS (ANTENNA RETURN LOSS TEST). THIS TEST SHALL BE PERFORMED TO THE SPECIFICATIONS AND PARAMETERS OUTLINED BY THE CLEARWIRE RADIO FREQUENCY (RF) ENGINEER. THIS TEST SHALL BE PERFORMED PRIOR TO FINAL ACCEPTANCE PF SITE.
- 2. VAPOR WRAP WILL BE USED TO SEAL ALL CONNECTIONS.
- 3. ALL COAXIAL CABLE WILL BE GROUNDED PRIOR TO ENTERING THE EQUIPMENT SPACE AND AS SPECIFIED IN THE ELECTRICAL DRAWINGS.
- ALL MAIN TRANSMISSION CABLE WILL BE TERMINATED AT A NEW/EXISTING POLYPHASER SURGE PROTECTOR LOCATED WITH THE EQUIPMENT SPACE.
- ALL COAXIAL CABLE WILL BE SECURED TO THE DESIGNED SUPPORT STRUCTURE AT DISTANCES NOT TO EXCEED 4'-0" WITH HARDWARE SPECIFIED IN THE COAXIAL CABLE ROUTING DETAILS.
- 6. ANTENNA CABLE LENGTHS HAVE BEEN PROVIDED BY OTHERS. CABLE LENGTHS LISTED ARE APPROXIMATE AND ARE NOT INTENDED TO BE USED FOR FABRICATION DUE TO FIELD CONDITIONS. ACTUAL ANTENNA CABLE LENGTHS REQUIRED MAY VARY FROM LENGTHS TABULATED. CONTRACTORS MUST FIELD VERIFY ANTENNA CABLE LENGTHS PRIOR TO ORDER.
- 7. ALL MAIN CABLES WILL BE COLOR CODED AT THREE (3) LOCATIONS:
  - A AT ANTENNA PRIOR TO JUMPER
    B. PRIOR TO ENTERING EQUIPMENT
    CABINET, AT CABLE ENTRY PORT
    C. INTERIOR SIDE OF EQUIPMENT
  - CABINET, AT CABLE ENTRY PORT
- ALL MAIN CABLES WILL BE GROUNDED AT:
   A. AT ANTENNA MOUNTING PIPE
   B. AT CABLE SUPPORT ASSEMBLY ON ROOF
   C. PRIOR TO ENTERING EQUIPMENT CABINET
- ALL TOP JUMPERS WILL BE MADE UP OF 1/2" DIA. LDF. THE CONTRACTOR SHALL USE ALL REASONABLE EFFORTS TO MINIMIZE THE LENGTH OF THE JUMPERS

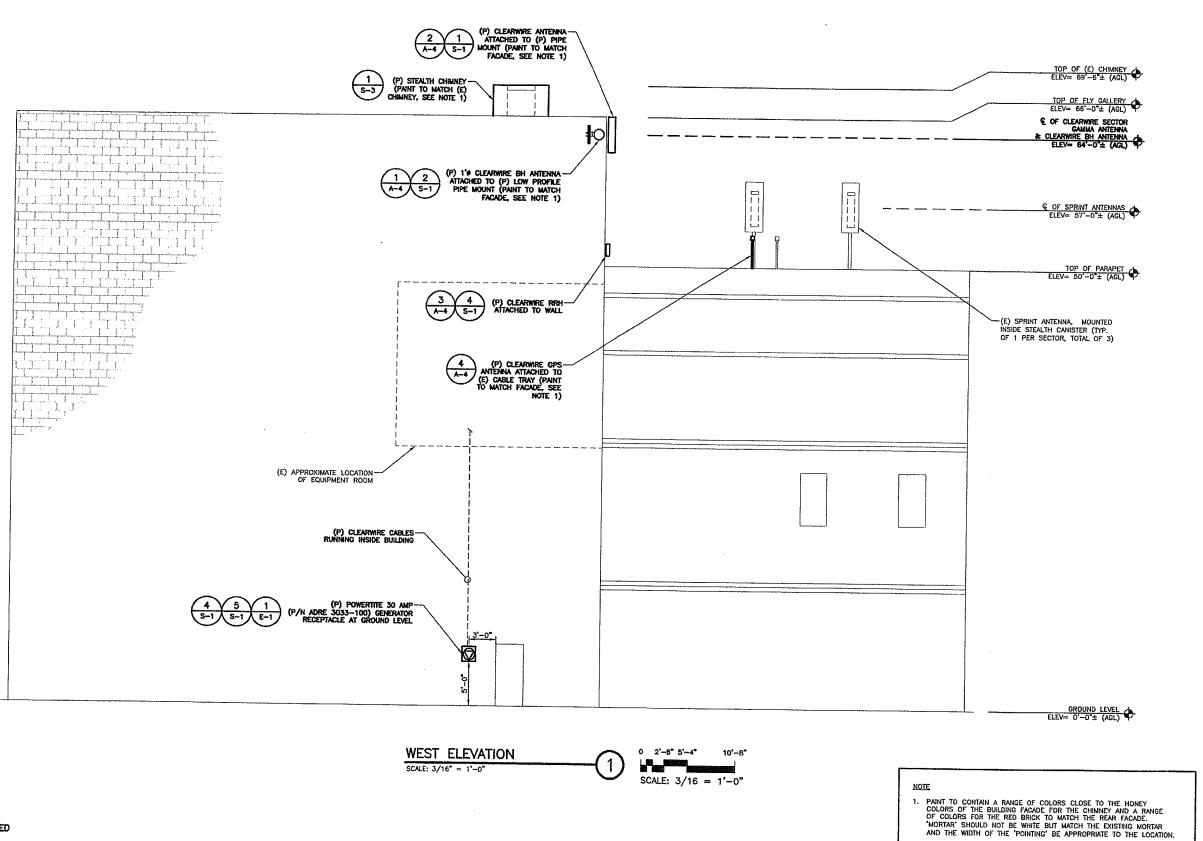
#### LEGEND

G-1

clearw're SYMBOL DESCRIPTION 4400 CARILLON POINT KIRKLAND, WA 98033 CB CIRCUIT BREAKER NON-FUSIBLE DISCONNECT SWITCH F FUSIBLE DISCONNECT SWITCH MAXTON SURFACE MOUNTED PANEL BOARD T MAXTON TECHNOLOGY, INC. BAY STATE KILOWATT HOUR METER DESIGN DENOTES CABLE OR CONDUIT TURNING UP IN PLAN VIEW DENOTES CABLE OR CONDUIT TURNING DOWN IN PLAN VIEW BAY STATE DESIGN, INC. JB PB 241 Boston Poet Rd. West Phone: 508-229-4100 Mariborough, NA. 01752 Fax: 508-485-5321 PULL BOX TO NEC/TELCO STANDARDS ---- OHU -----OVERHEAD UTILITIES SOMERVILLE --- ugr ----UNDERGROUND TELCO --- UGP UNDERGROUND POWER THEATER 2/ DENOTES REFERENCE NOTE HOST #: EXOTHERMIC WELD CONNECTION BS58XC001-A MECHANICAL CONNECTION GROUND ROD SITE # GROUND ROD WITH INSPECTION SLEEVES MA-BOS5902-A т. GROUND BAR -€₹ PIN AND SLEEVE RECEPTACLE GROUND CONDUCTOR CONSTRUCTION DWG'S 4 05/07/10 PER COMMENTS **ABBREVIATIONS** 3 11/24/09 PER COMMENTS 2 11/18/09 | PER COMMENTS AFG ABOVE FINISHED GRADE 10/21/09 PER COMMENTS AMPERE INTERRUPTING CAPACITY 0 10/09/09 FOR CONSTRUCTION BELOW FINISHED GRADE A 06/16/09 ISSUE FOR REVIEW C CONDUIT CRGB CELL REFERENCE GROUND BAR ENTH OF MASS CD COPPER C/W COMPLETE WITH IVAN B. D.T.T. DRY TYPE TRANSFORMER FILEV DIAMETER DIA. STRUCTURAL EC EMPTY CONDUIT No. 48078 REGISTERED. EMT ELECTRO MAGNETIC TURING AVOS PINES OF OS OS OS 10. ĠE GROUNDING ELECTRODE GEC GROUNDING ELECTRODE CONDUCTOR GRC GALVANIZED RIGID CONDUIT DRAWN BY: JM CHECKED BY: JT/GG MTS MANUAL TRANSFER SWITCH NEC NATIONAL ELECTRICAL CODE JOB #: 2900.122 OVERHEAD SITE ADDRESS: PDC POWER DISTRIBUTION CABINET POLYVINYL CHLORIDE PVC 49 DAVIS SQUARE RIGID NON-METALLIC CONDUIT RNC SOMERVILLE, MA 02143 SCHED SCHEDULF SERVICE DISCONNECT SWITCH SD SE SERVICE ENTRANCE SOLID NEUTRAL SN SHEET TITLE: TGB TELCO GROUND BAR TOWER EXIT GROUND BAR TEGR GENERAL NOTES TR TRANSFORMER TRANSIENT VOLTAGE SURGE SUPPRESSOR TVSS TYPICAL SHEET NUMBER: U/G WEATHERPROOF - NEMA 3R







APPLICANT:

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4400 CARILLON POINT KIRKLAND, WA 98033



BAY STATE DESIGN, INC. Architects • Engineers

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SITE NAME:

SOMERVILLE THEATER

HOST #:

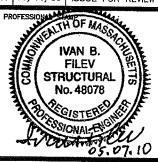
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SITE #:

MA-BOS5902-A

#### CONSTRUCTION DWG'S

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Α	06/16/09	ISSUE FOR REVIEW



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2900.122

CHECKED BY: JT/GG

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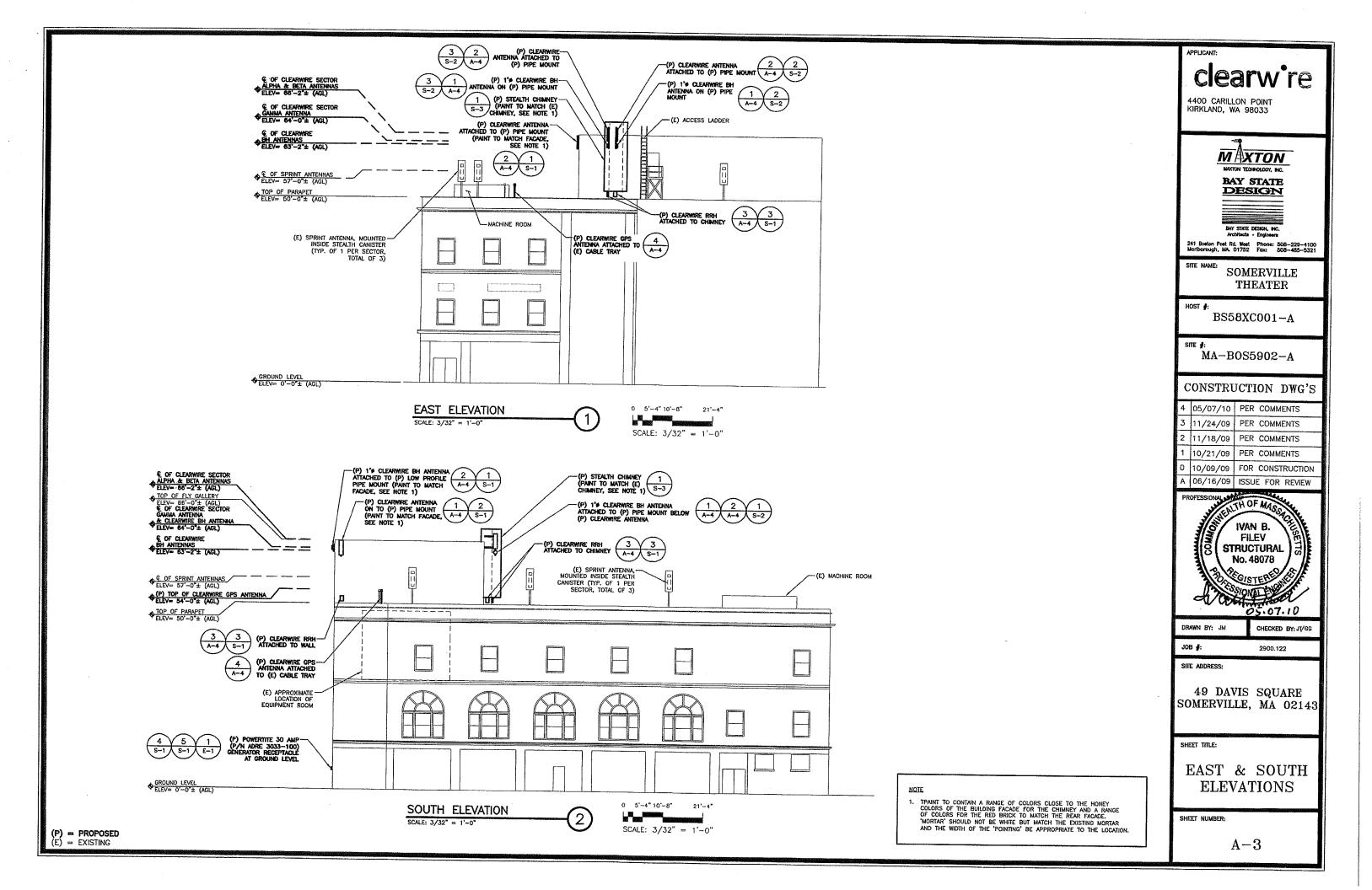
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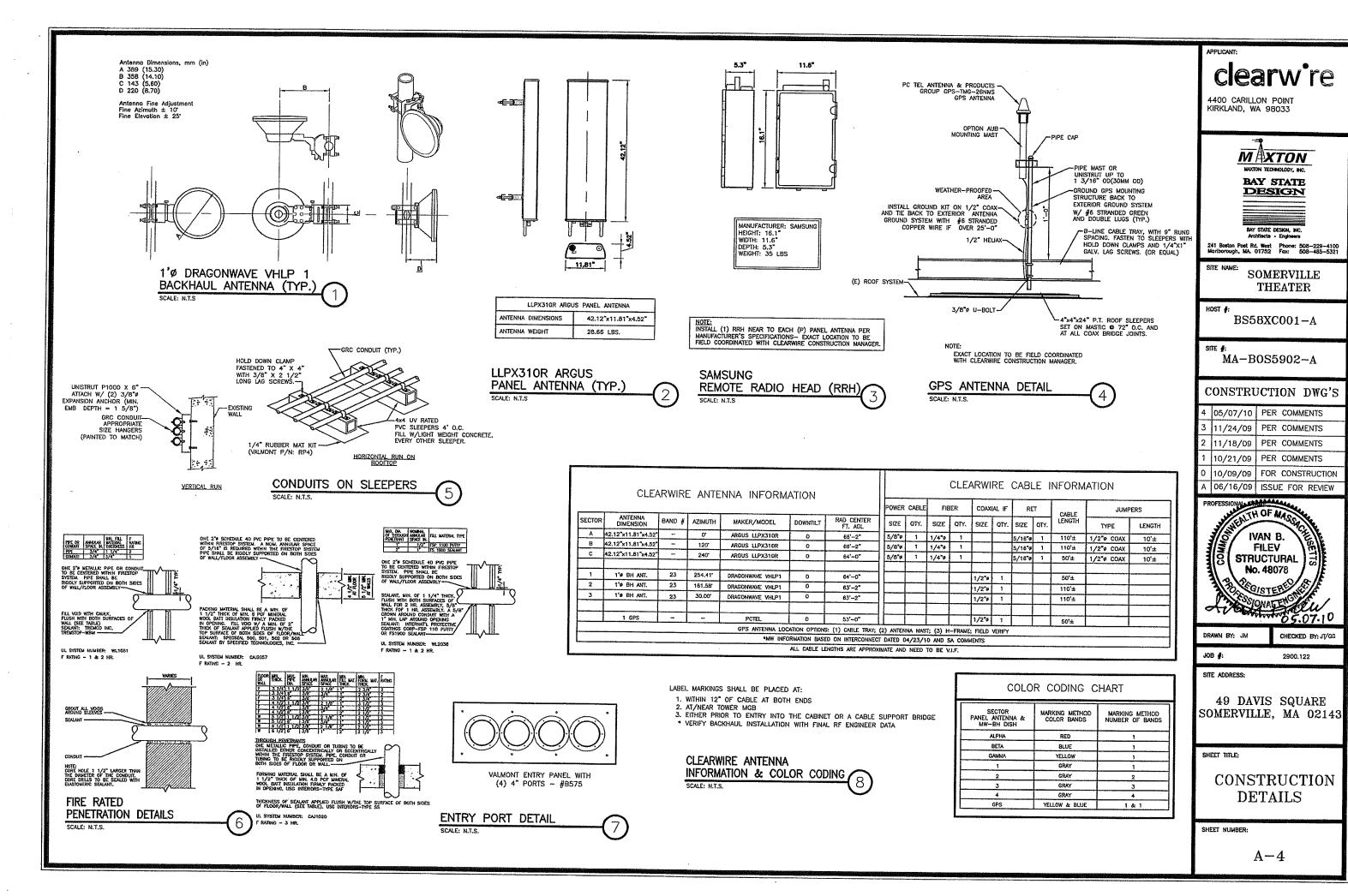
WEST ELEVATION

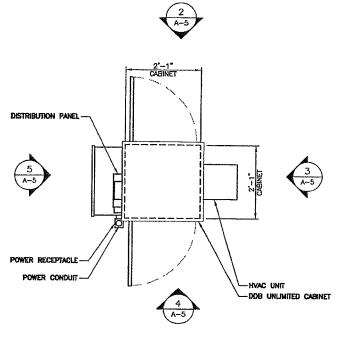
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A-2

(P) = PROPOSED (E) = EXISTING







#### DDB UNLIMITED R7-54DXCW-ACD CABINET

#### BATTERY INFORMATION:

LONG DURATION SERIES — TEL 12-70

1. FLAM E-ARRESTING ONE-WAY PRESSURE-RELIEF
VENT FOR SAFETY AND LONG LIFE.

2. THERMALLY WELDED CASE-TOOCOVER BOND TO
ENSURE A LEAK-PROOF SEAL.

3. FLAME-RETARDANT POLYPROPYLENE CASE AND
COVER COMPLIANT WITH UL94 V-O WITH AN OXYGEN
LIMITING INDEX OF GREATER THAN 28.

4. COMPLIES WITH UL 1778, 924, 1989 AND 94 V-O.

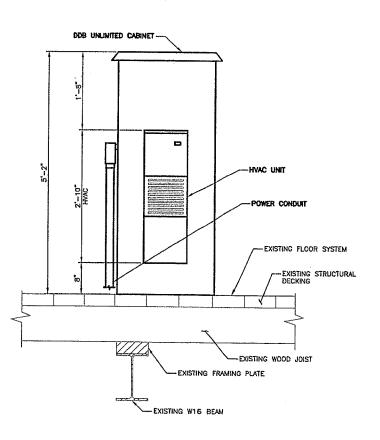
5. UL-RECOGNIZED COMPONENT.

6. NOT RESTRICTED FOR SURFACE
TRANSPORT-CLASSIFIED AS NON-HAZARDOUS MATERIAL
AS RELATED TO DOT-CFR TITLE 49 PARTS 171-189.

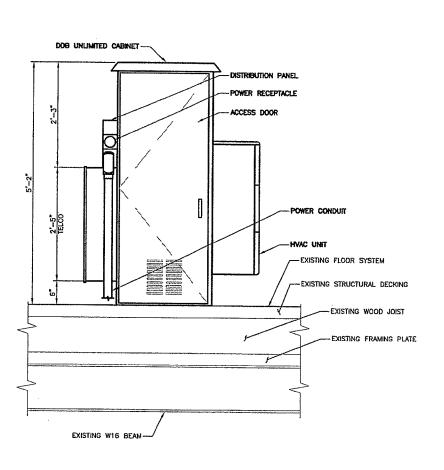
TEL 12-70 SPECIFICATIONS:
CELLS PER UNIT = 6
VOLTAGE PER UNIT = 12.84
WEIGHT = 55 LBS
ELECTROLYTE = ABSORBED H2SO4 / SG = 1.300
VOLUME: 8.02" X 10.17" X 6.65" = 542.40 cu in MAX = 4

NOTE:

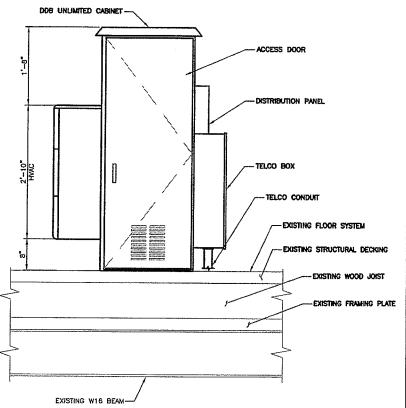
REFER TO CABINET MANUFACTURER INSTRUCTIONS FOR CABINET INSTALLATION.



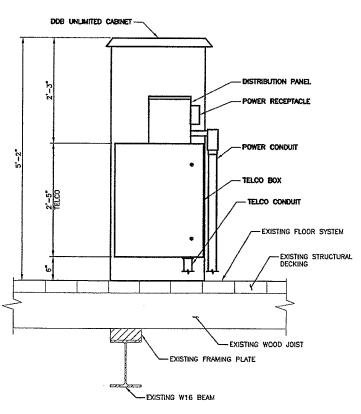




CABINET ELEVATION (FRONT)



## CABINET ELEVATION (BACK)



CABINET ELEVATION (RIGHT) (5)

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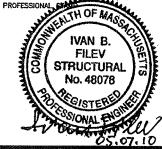
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CONSTRUCTION DWG'S

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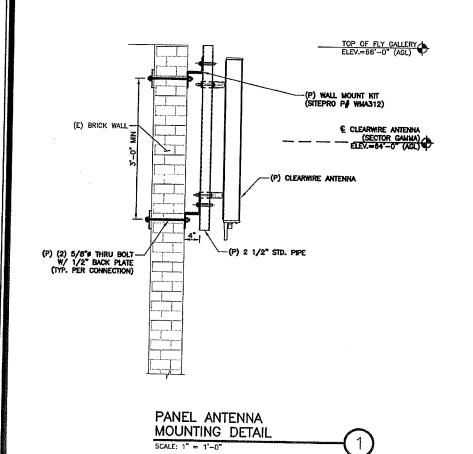
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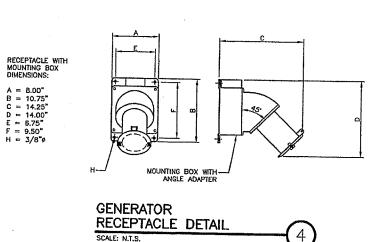
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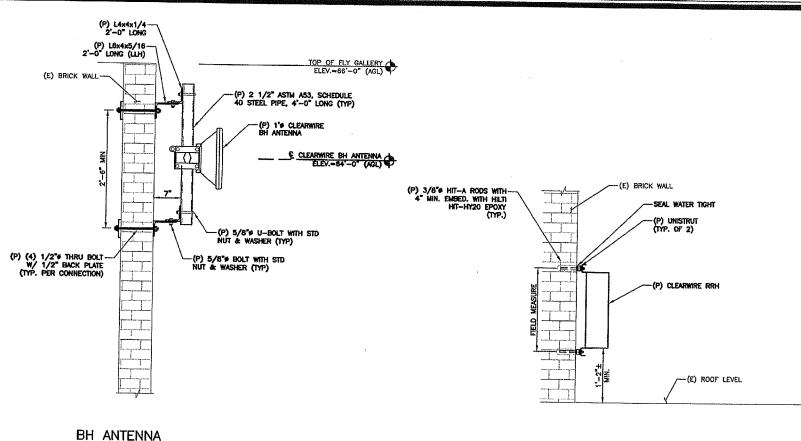
**CABINET DETAILS** 

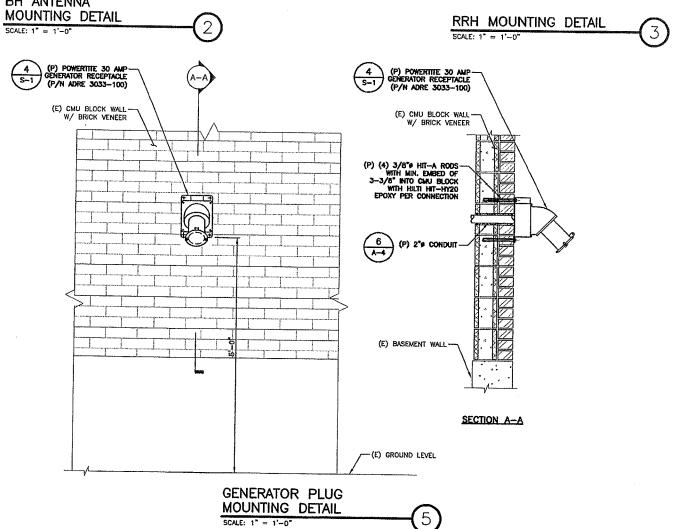
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THEATER

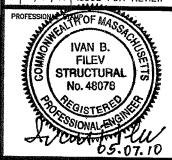
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JOB #:

SITE ADDRESS:

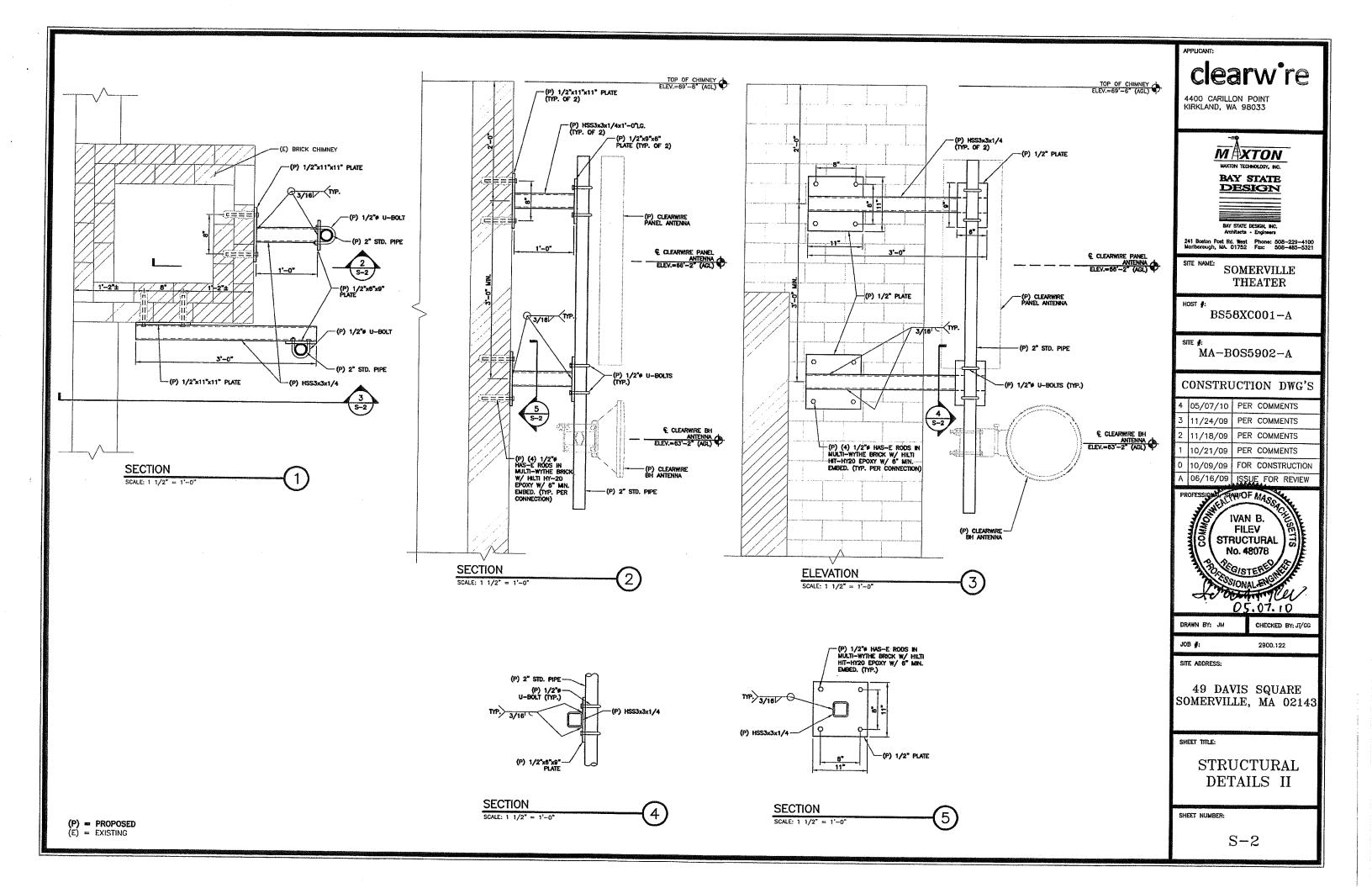
49 DAVIS SQUARE SOMERVILLE, MA 02143

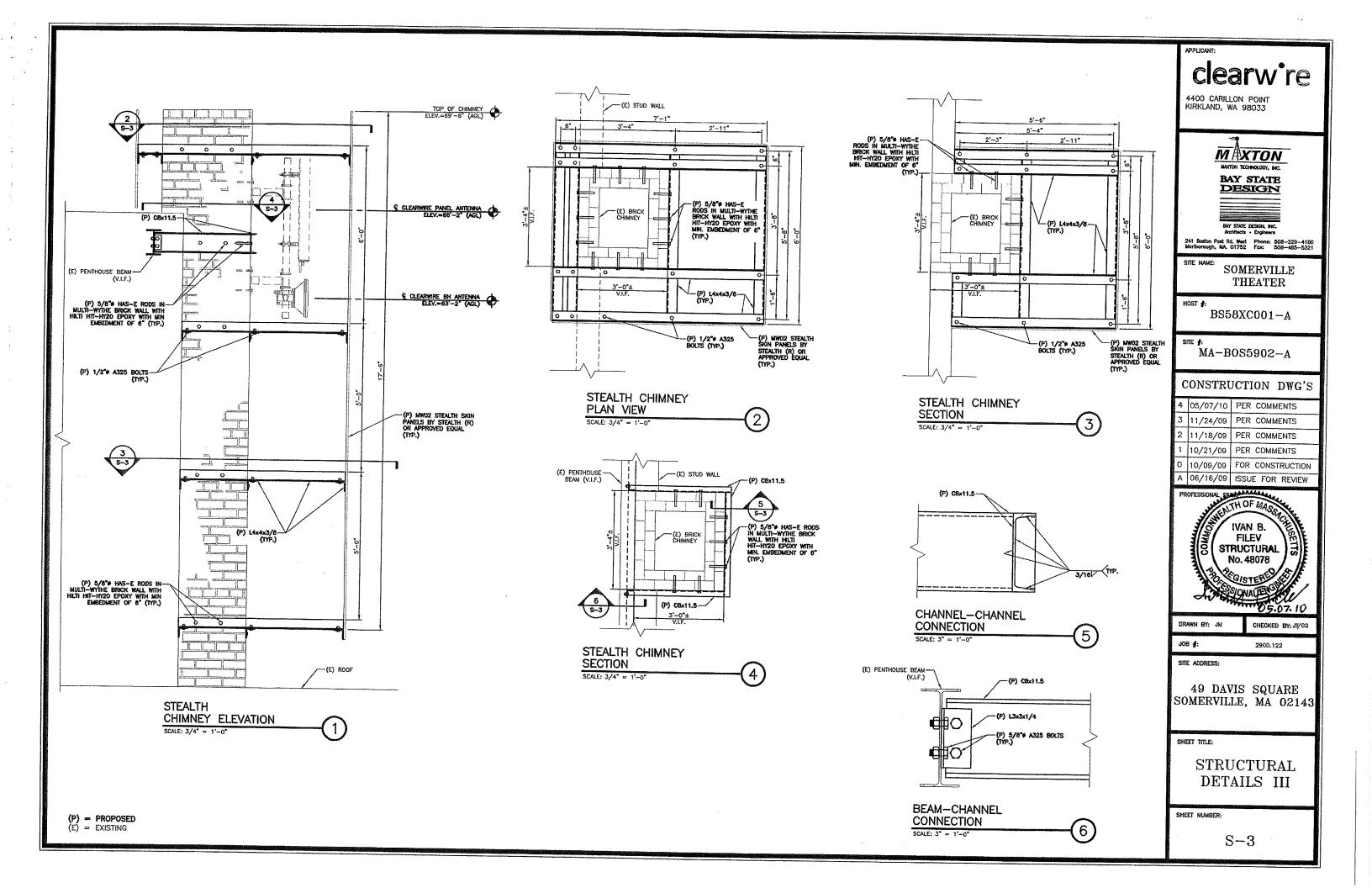
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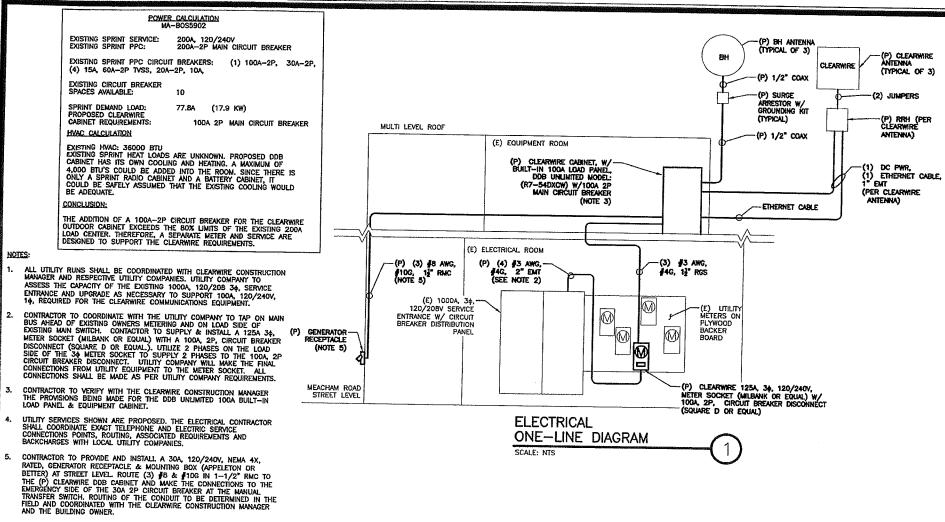
STRUCTURAL DETAILS I

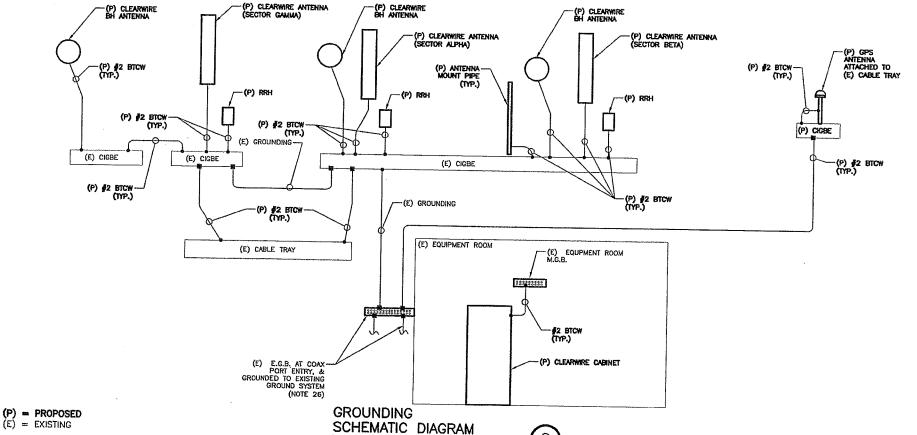
SHEET NUMBER:

S-1









#### GROUNDING SPECIFICATIONS:

- 1. GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- 2. ALL GROUNDING DEVICES SHALL BE U.L. APPROVED OR LISTED FOR THEIR INTENDED USE.
- 3. GROUND WIRES SHALL BE TINNED #2 AWG BARE SOLID Cu UNLESS NOTED OTHERWISE.
- GROUNDING CONNECTIONS SHALL BE EXOTHERMIC (CADWELD) UNLESS NOTED OTHERWISE. CLEAN SURFACES TO SHINY METAL. WHERE GROUND WIRES ARE CADWELDED TO GALVANIZED SURFACES. SPRAY CADWELD WITH GALVANIZING PAINT.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 8° RADIUS.
- 6. PRIOR TO INSTALLING LUGS ON GROUND WIRES, APPLY THOMAS & BETS KOPR—SHIELD (TM OF JET LUB INC.) PRIOR TO BOLTING GROUND WIRE LUGS TO GROUND BARS, APPLY KOPR—SHEILD OR
- 7. WHERE BARE COPPER GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO GROUND RING. INSTALL WIRE IN 3/4" PVC SLEEVE, FROM 1'-0" ABOVE GRADE AND SEAL TOP WITH SILICONE MATERIAL.
- B. PREPARE ALL BONDING SURFACES FOR GROUNDING CONNECTIONS BY REMOVING ALL PAINT AND CORROSION DOWN TO SHINY METAL. FOLLOWING CONNECTION, APPLY APPROPRIATE ANTI-OXIDIZATION PAINT.
- GROUNDING WIRE CONNECTIONS SHALL BE 3-CRIMP C-TAP COMPRESSION TYPE. SPLIT BOLTS ARE NOT ACCEPTABLE.
- 10. GROUND RODS SHALL BE COPPER CLAD STEEL 5/8"x10" SPACED NOT LESS THAN 10' O.C.
- 11. CONNECTORS SHALL BE CRIMPED USING HYDRAULIC CRIMPING TOOLS.
- 12. SURFACE CONNECTIONS SHALL BE MADE TO BARE METAL PAINTED SURFACES SHALL BE FILED TO ENSURE PROPER CONTACT. APPLY NON-OXIDIZING AGENT TO CONNECTIONS.
- COPPER BUSES SHALL BE CLEANED, POLISHED AND A NON-OXIDIZING AGENT APPLIED. NO FINGERPRINTS OR DISCOLORED COPPER WILL BE PERMITTED.
- 14. GROUNDING CONDUCTORS SHALL BE RUN THROUGH PVC SLEEVE WHERE ROUTED THROUGH WALLS, FLOORS AND CEILING. ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
- 15. HARDWARE (I.E. NUTS, BOLTS, WASHERS, ECT.) IS TO BE STAINLESS STEEL.
- 16. EXOTHERMIC WELDS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S
- 17. THE ENTIRE SYSTEM SHALL BE SOLIDLY GROUNDED USING LOCKNUTS AND BONDING NUTS ON CONDUITS AND PROPERLY BONDED GROUND CONDUCTORS, RECEPTACLES AND EQUIPMENT BRANCH CIRCUITS SHALL BE GROUNDED WITH A FULL SIZED EQUIPMENT GROUNDING CONDUCTOR RUN IN
- 18. INSTALL GROUND BUSHINGS ON ALL METALLIC CONDUITS AND BOND TO THE EQUIPMENT GROUND BUS IN THE PANEL BOARD.
- 19. GROUND BARS (SECTOR, COLLECTOR, MASTER) SHALL BE BARE 1/4"x4" COPPER; LARGE ENOUGH TO ACCOMMODATE THE REQUIRED NUMBER OF GROUND CONNECTIONS, THE HARDWARE SECURING THE MIGB SHALL ELECTRICALLY INSULATE THE MIGB FROM ANY STRUCTURE TO WHICH IT IS
- 20. APPLY T&B KOPR-SHIELD OR APPROVED EQUAL PRIOR TO MAKING MECHANICAL CONNECTIONS. CONNECTIONS SHALL BE MADE WITH STAINLESS STEEL BOLTS, NUTS AND LOCK WASHERS 3/8" DIAMETER MIN. WHERE GALVANIZING IS REMOVED FROM METAL, IT SHALL BE PAINTED OR TOUCHED UP WITH "GALVONOX" OR EQUAL,
- 21. ALL TERMINATIONS AT EQUIPMENT ENCLOSURES, PANELS, FRAMES OF EQUIPMENT AND WHERE EXPOSED FOR GROUNDING CONDUCTOR TERMINATION SHALL BE PERFORMED UTILIZING TWO HOLE BOLTED TONGUE COMPRESSION TYPE WITH STAINLESS STEEL SELF—TAPPING SCREWS.
- 22. ALL CLAMPS AND SUPPORTS USED TO SUPPORT THE GROUNDING SYSTEM CONDUCTORS AND PVC CONDUITS SHALL BE PVC TYPE (NON-CONDUCTIVE). DO NOT USE METAL BRACKETS OR SUPPORTS WHICH WOULD FORM A COMPLETE RING AROUND ANY GROUNDING CONDUCTOR.
- 23. ALL BOLTS, WASHERS AND NUTS USED ON GROUNDING CONNECTIONS SHALL BE STAINLESS STEEL.
- 24. THE CONTRACTOR SHALL ENGAGE AN INDEPENDENT ELECTRICAL TESTING FIRM TO TEST AND VERIFY THAT RESISTANCE TO EARTH DOES NOT EXCEED 5.0 OHMS. PROVIDE A COPY OF TESTING REPORT. INCLUDING THE METHOD AND INSTRUMENTS USED TO VERIFY RESISTANCE TO CLEARWIRE REPRESENTATIVE.
- 25. BOND CABINET THROUGH THE MAIN GROUND BAR.
- 26. THE CONTRACTOR TO SECURE A COPY OF ANY SOIL RESISTINY AND/OR SITE RESISTANCE TO EARTH TESTING PREVIOUSLY PERFORMED. IF NO RECORDS ARE AVAILABLE A FOUR POINT SOIL RESISTIVITY TEST SHALL BE PERFORMED TO ASSURE 5 OHMS OR LESS WITH SOIL RESISTIVITY UP TO 50,000
- 27. WHEN CLEARWIRE ANTENNAS EXCEED IN ELEVATION THE EXISTING LIGHTNING RODS THEN LIGHTNING RODS SHALL BE ADDED TO CLEAR WIRE ANTENNAS AS DETAILED IN SNP-312-203.
- 28. GROUNDING SYSTEM SHALL MEET CLEARWIRE GROUNDING STANDARDS.

4400 CARILLON POINT

KIRKLAND, WA 98033

clearw're



BAY STATE DESIGN

BAY STATE DESIGN, INC. Architects - Engineers

241 Boston Post Rd. West Phone: 508-229-4100 Marlborough, MA. 01752 Fax: 508-485-5321

SOMERVILLE THEATER

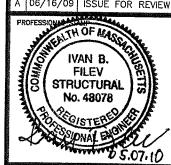
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SITE #:

MA-BOS5902-A

#### CONSTRUCTION DWG'S

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	4	05/07/10	PER COMMENTS				
	3	11/24/09	PER COMMENTS				
	2	11/18/09	PER COMMENTS				
	1	10/21/09	PER COMMENTS				
Ì	0	10/09/09	FOR CONSTRUCTION				
	A	06/16/09	ISSUE FOR PEVIEW				



DRAWN BY: JMS

JOB #:

SITE ADDRESS.

49 DAVIS SQUARE SOMERVILLE, MA 02143

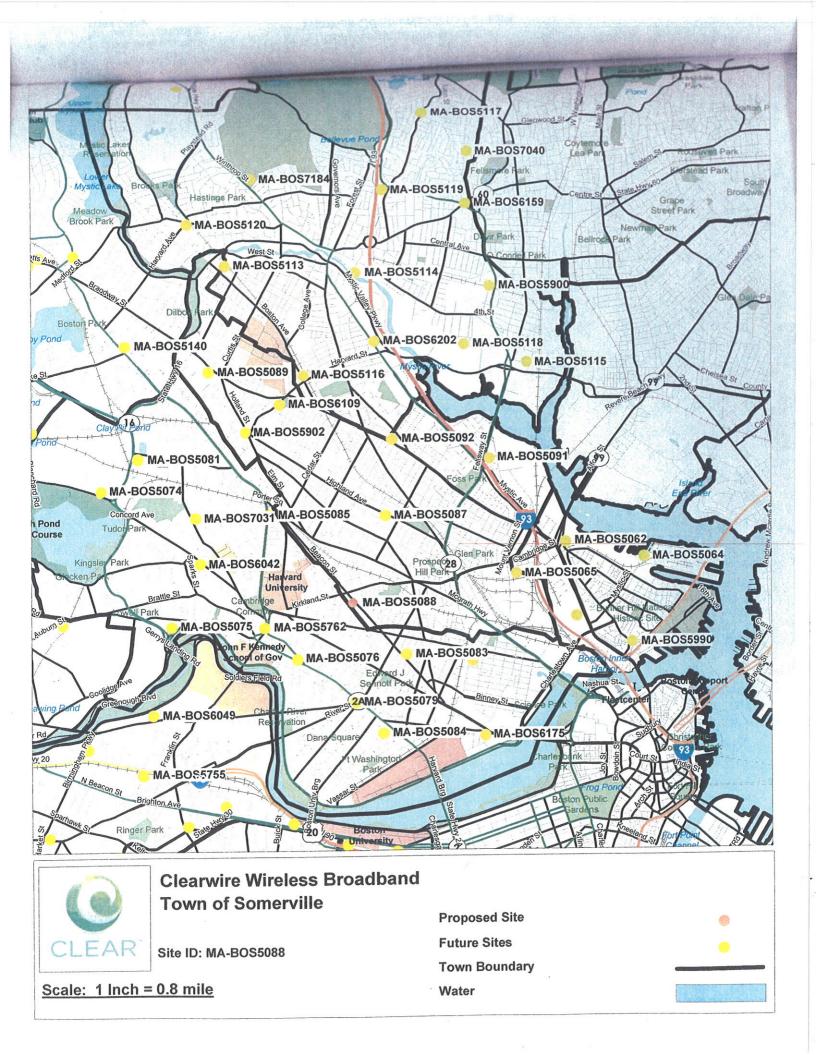
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ELECTRICAL & GROUNDING SCHEMATIC

SHEET NUMBER:

E-1



#### PREPARED FOR



PROPOSED WIRELESS
TELECOMMUNICATIONS INSTALLATION

MA-BOS5902 SOMERVILLE THEATER

PROVIDED BY: BAY STATE DESIGN, INC. NOVEMBER 2009

BAY STATE DESIGN



Site Name: Somerville Theater Site Number: MA-BOS5902

> 49 Davis Square Somerville, MA 02143

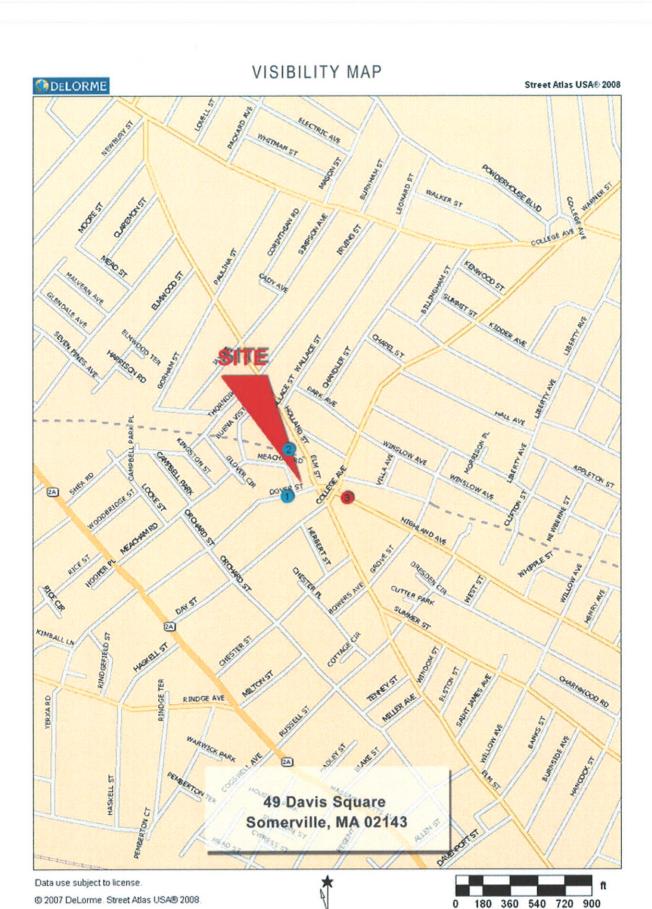
#### Provided By:

Bay State Design, Inc. 70 Tower Office Park Woburn, MA 01801 ph. 781| 932.2467 fax 781| 932.9771

Issued: November 2009

Rev. 1: Rev. 2: Drawn By: A.L. Checked By: J.T.

Note: These photo simulations are intended to represent modifications relative to a person observing the aesthetics of the proposed telecommunications installation. Therefore, they are inherently approximate in nature and should not be used as an exact, scaled, engineering drawing.



MN (15.1° W)



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Data Zoom 15-0

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#### PREPARED FOR



PROPOSED WIRELESS
TELECOMMUNICATIONS INSTALLATION

MA-BOS5902 SOMERVILLE THEATER

PROVIDED BY: BAY STATE DESIGN, INC. DECEMBER 2009

BAY STATE DESIGN



Site Name: Somerville Theater
Site Number: MA-BOS5902

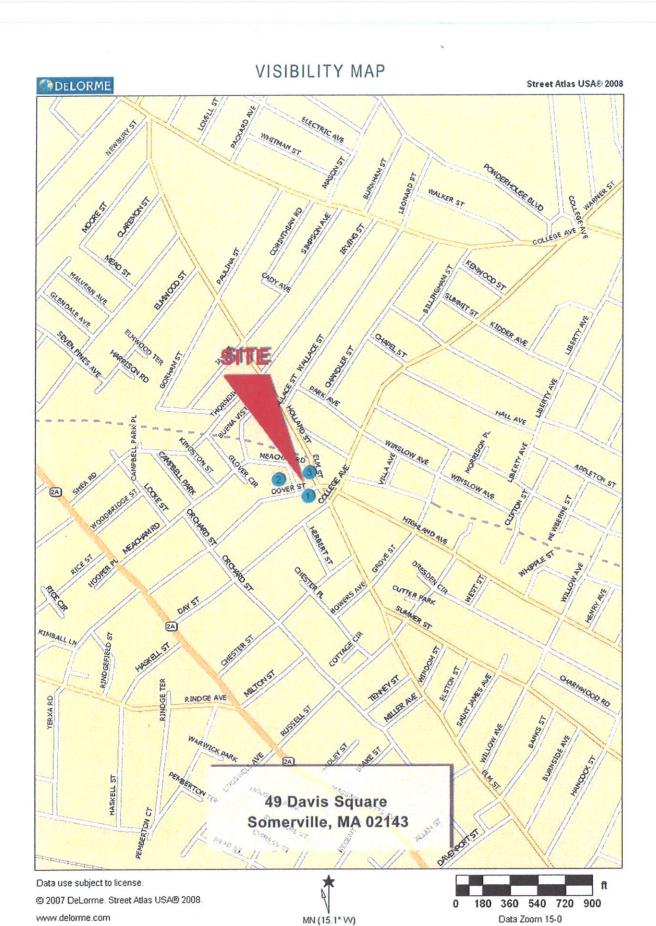
49 Davis Square Somerville, MA 02143

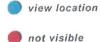
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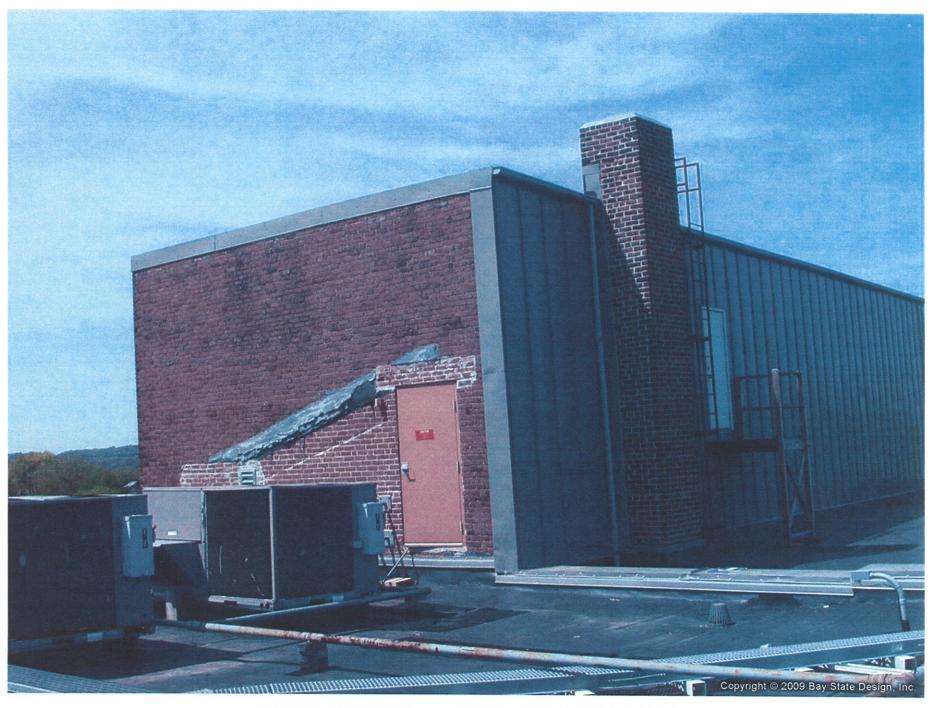
Bay State Design, Inc. 70 Tower Office Park Woburn, MA 01801 ph. 781| 932.2467 fax 781| 932.9771

Rev. 1:
Rev. 2:
Drawn By: A.L.
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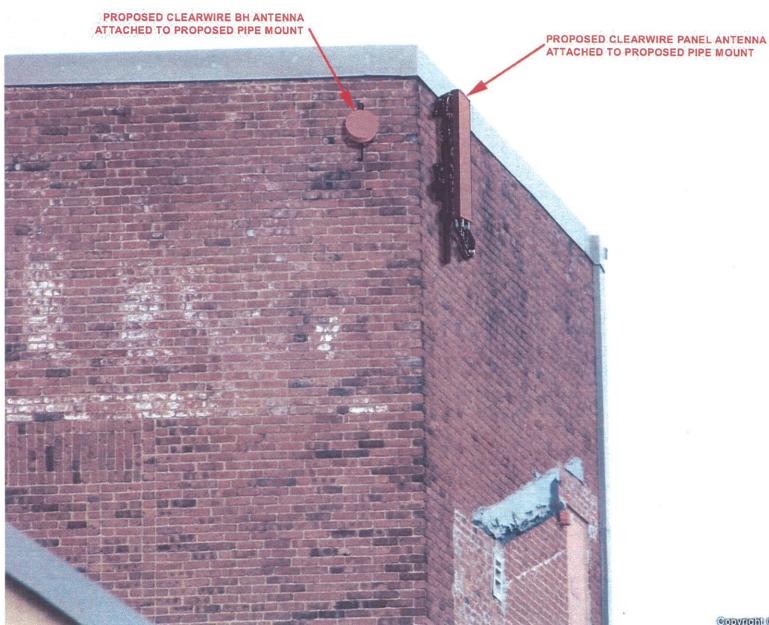
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