

LAND USE DEPARTMENT
TOWN OF NEW FAIRFIELD
4 Church Hill Road
New Fairfield, CT 06912-2665

ZONING _____ DATE _____
EROSION _____
SANITARIAN _____
PUBLIC WORKS _____
FIRE MARSHAL _____
BUILDING OFF. _____

FILE COPY

Cellco Partnership

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WIRELESS COMMUNICATIONS FACILITY

NEW FAIRFIELD

TITICUS MOUNTAIN ROAD

NEW FAIRFIELD, CONNECTICUT

GENERAL NOTES

- ALL WORK SHALL COMPLY WITH THE LATEST ACCEPTED EDITIONS OF BOCA NATIONAL BUILDING CODE W/CONNECTICUT SUPPLEMENT, NFPA 101 WITH CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE AND LOCAL CODES.
- CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
- CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
- CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, PLUMBING, ELECTRICAL AND HVAC. PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
- CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN 'AS-BUILT' SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
- LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDING'S OPERATIONS, COORDINATE WORK WITH BLDG. OWNER.
- DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
- ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR.'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
- ANY AND ALL ERRORS, DISCREPANCIES, AND 'MISSED' ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE CLIENT DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO INCLUDED IN THE BID. NO 'EXTRA' WILL BE ALLOWED FOR MISSED ITEMS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
- CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
- COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL NOTIFY THE MANAGEMENT OF ANY AND ALL ACTIVITIES THAT MAY DISRUPT DAILY BUILDING OPERATIONS IN WRITING A MINIMUM OF THREE (3) DAYS IN ADVANCE. WORK SHALL BE ARRANGED FOR CONTINUOUS PERFORMANCE WHENEVER POSSIBLE. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, INCLUDING OVERTIME, IF REQUIRED, TO ASSURE THAT EXISTING OPERATING SERVICES WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE NECESSARY CONNECTIONS.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB-CONTRACTORS FOR ANY CONDITION PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
- ANY DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ANY REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455.
- CONTRACTOR SHALL COMPLY WITH OWNERS ENVIRONMENTAL ENGINEER ON ALL METHODS AND PROVISIONS FOR ALL EXCAVATION ACTIVITIES INCLUDING SOIL DISPOSAL. ALL BACKFILL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.

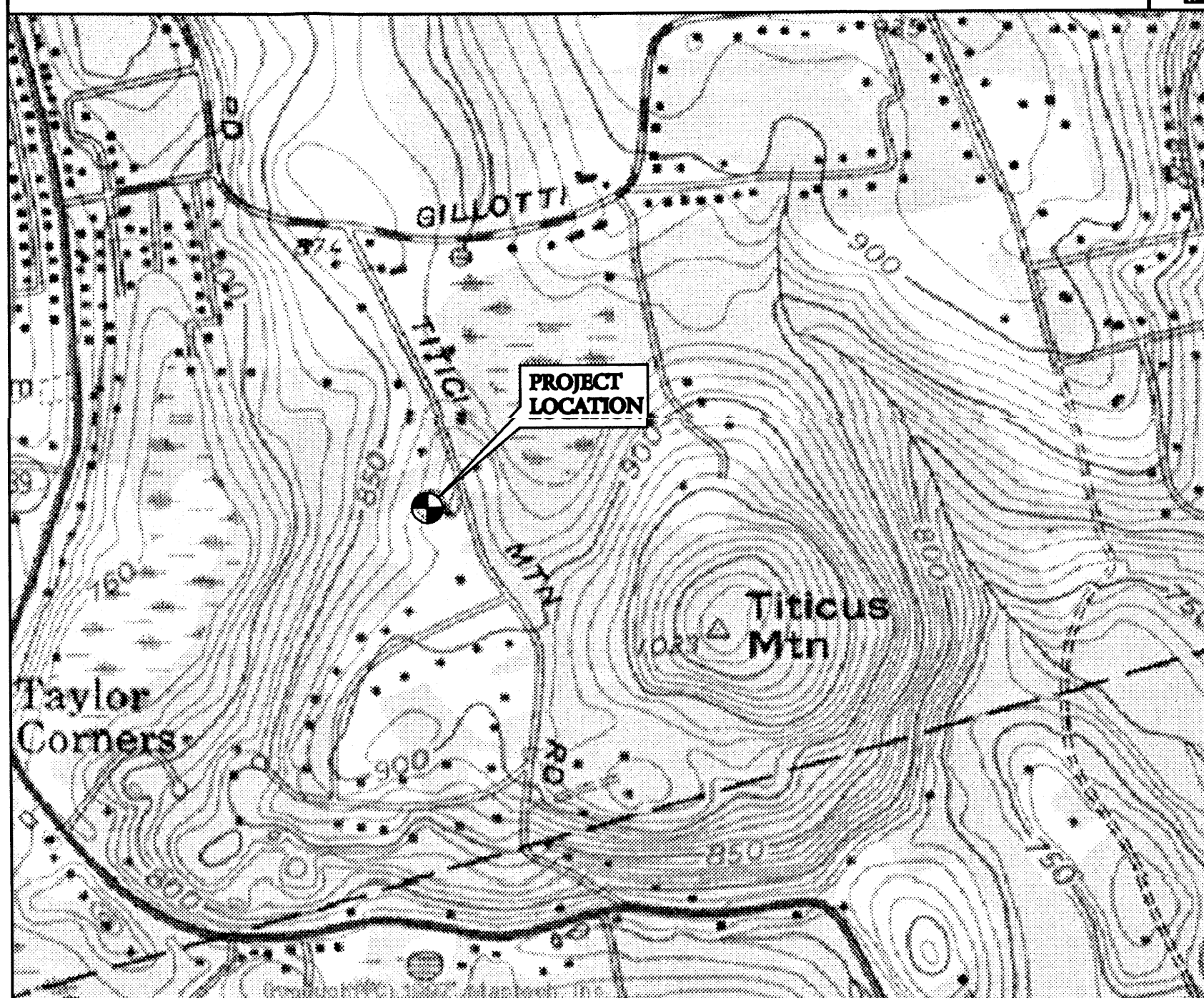
SITE DIRECTIONS

FROM: 99 EAST RIVER DRIVE
HARTFORD, CT
TO: TITICUS MOUNTAIN ROAD
NEW FAIRFIELD, CT

START OUT GOING EAST ON EAST RIVER DRIVE TOWARD DARLIN STREET. TURN LEFT TO STAY ON EAST RIVER DRIVE. TURN LEFT ONTO US-44W/CONNECTICUT BLVD. STAY STRAIGHT TO GO ONTO RAMP. MERGE ONTO I-84W/US-6W/US-44W. MERGE ONTO I-84W. TAKE THE CT-39 EXIT (EXIT 5) TOWARD CT-53/DOWNTOWN DANBURY/BETHEL. TURN LEFT ONTO NORTH MAIN STREET/CT-39. CONTINUE TO FOLLOW CT-39. STAY STRAIGHT TO GO ONTO OLD BALL POND ROAD. OLD BALL POND ROAD BECOMES TITICUS MOUNTAIN ROAD. TOWER ON LEFT ABOUT 1/2 MILE NORTH ON TITICUS MOUNTAIN RD.

VICINITY MAP

NOT TO SCALE



PROJECT SUMMARY

SITE NAME: NEW FAIRFIELD
SITE ADDRESS: TITICUS MOUNTAIN ROAD
NEW FAIRFIELD, CONNECTICUT
CONTACT PERSON: MARK GAUGER
VERIZON WIRELESS
GOVERNING CODE: CONNECTICUT BUILDING CODE
CONNECTICUT LIFE SAFETY CODES
LEASOR: VERIZON WIRELESS
APPLICANT: VERIZON WIRELESS
99 EAST RIVER DRIVE
HARTFORD, CT. 06108
ENGINEER: NATCOMM LLC.
63-2 NORTH BRANFORD RD.
BRANFORD, CT. 06405
TOWER COORDINATES: LATITUDE: 41°-27'-03"
LONGITUDE: 73°-30'-58"

ABBREVIATIONS

B/FTG. BOTTOM OF FOOTING ELEVATION
T/SLAB TOP OF SLAB ELEVATION
F.F. FINISHED FLOOR
N.T.S. NOT TO SCALE
BRG. PL. BEARING PLATE

LEGEND

SYMBOL	DESCRIPTION
	SECTION OR DETAIL NUMBER
	SHEET WHERE DETAIL/SECTION OCCURS
	ELEVATION NUMBER
	SHEET WHERE ELEVATION OCCURS

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	00
C-1	COMPOUND PLAN & TOWER ELEVATION	00
C-2	EQUIPMENT ROOM PLAN SCHEDULE AND NOTES	00
C-3	SITE DETAILS AND NOTES	00
M-1	MECHANICAL PLAN	00
M-2	MECHANICAL DETAILS AND SCHEDULES	00
M-3	MECHANICAL SPECIFICATIONS	00
E-1	ELECTRICAL NOTES & ABBREVIATIONS	00
E-2	ELECTRICAL PLANS	00
E-3	ELECTRICAL DETAILS	00
E-4	GROUNDING DETAILS	00
E-5	CELLULAR DETAILS	00
E-6	CABLE TRAY PLAN & DETAILS	00
E-7	ELECTRICAL SPECIFICATIONS	00

REVISIONS

NO.	DATE	DESCRIPTION
00	08/19/05	BUILDING PERMIT

Cellco Partnership

d.b.a. **verizon** wireless



Natcomm, L.L.C.

63-2 North Branford Road
Branford, Connecticut 06405

Tel: (203) 488-0580
Fax: (203) 488-0587

Consulting Engineers - Project Management
Civil - Structural - Mechanical - Electrical

NEW FAIRFIELD

TITICUS MNT. RD.
NEW FAIRFIELD, CONNECTICUT

PROJECT NO: 05073

DRAWN BY: TMS

CHECKED BY: CFC

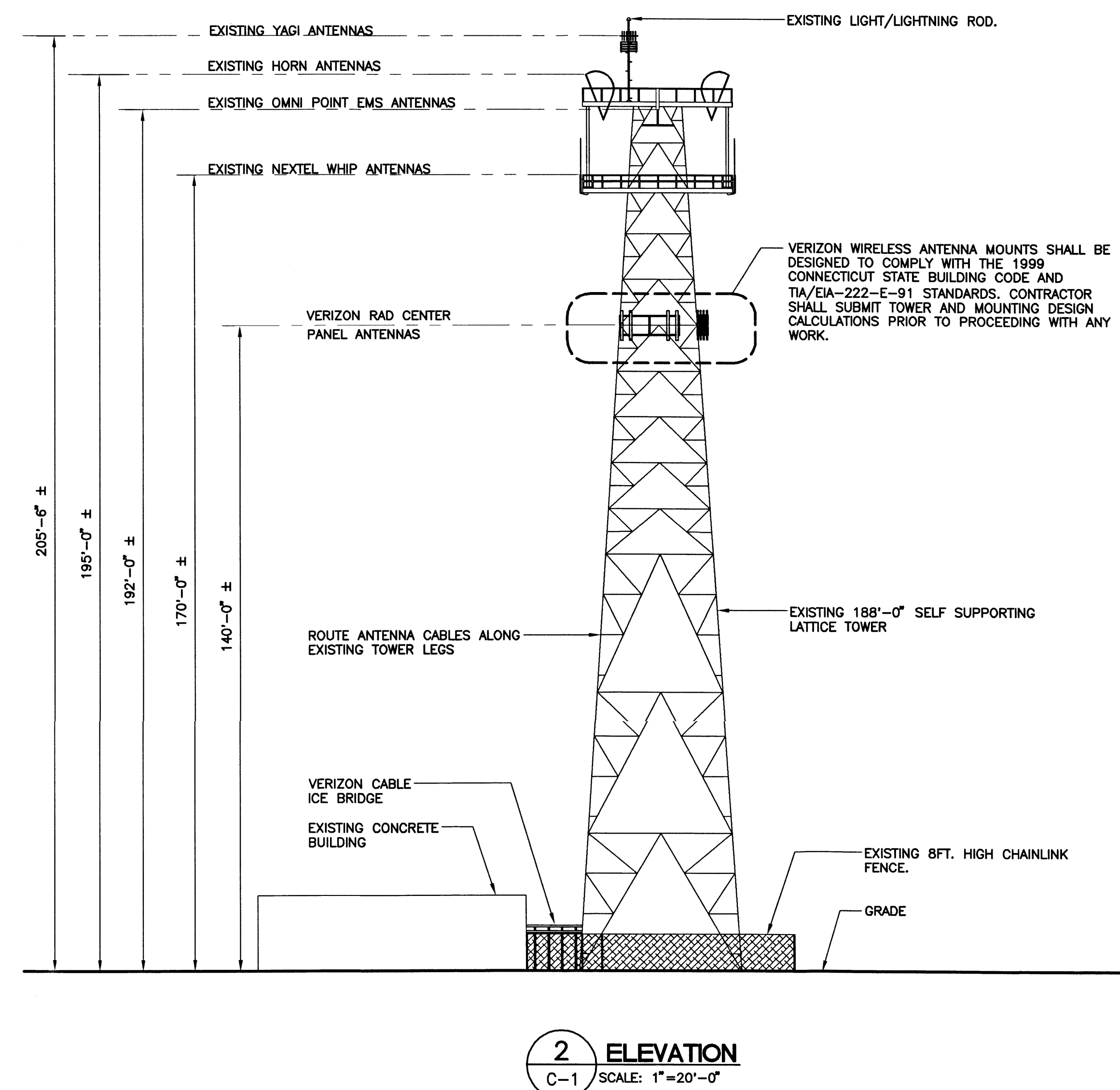
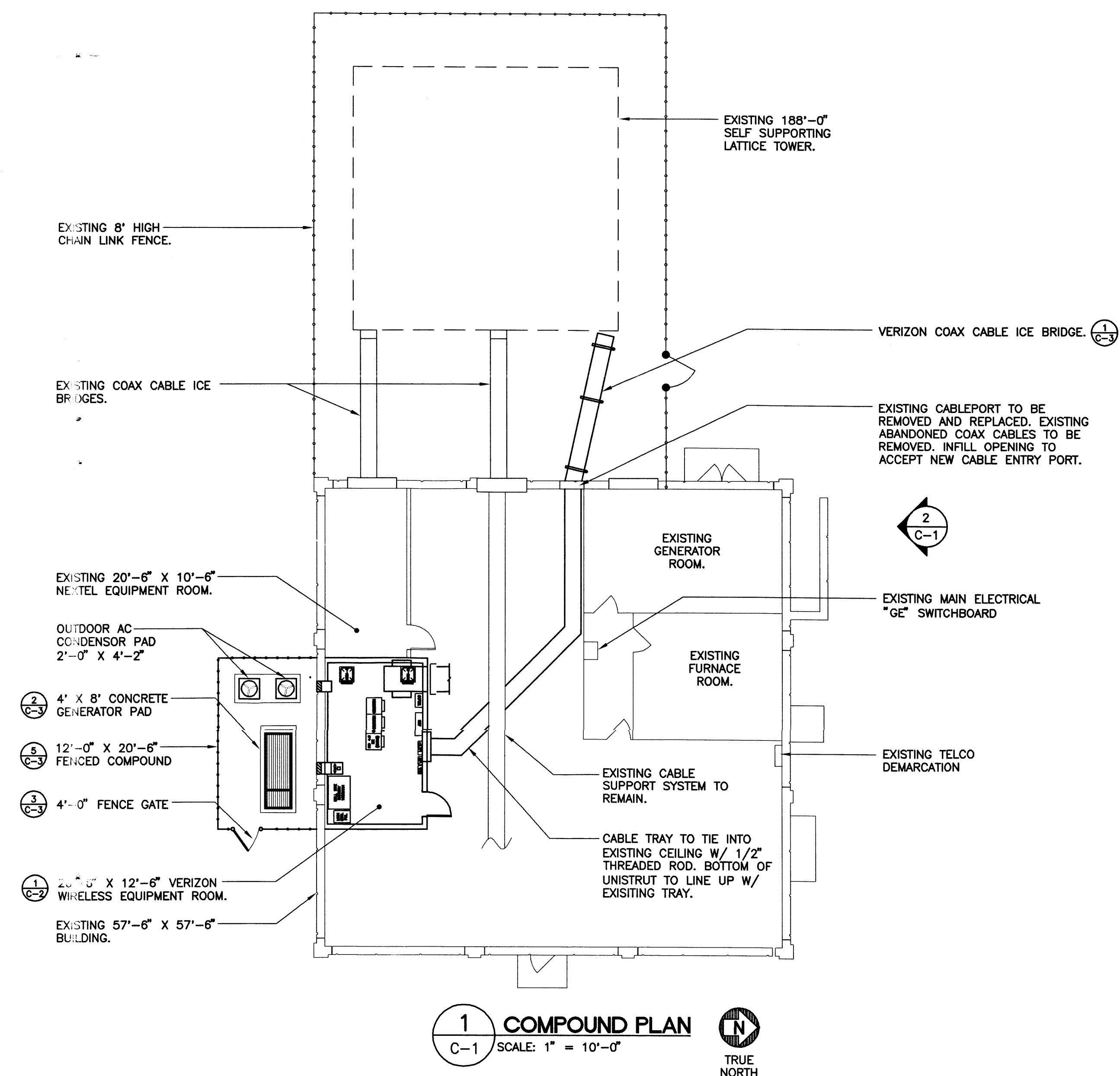
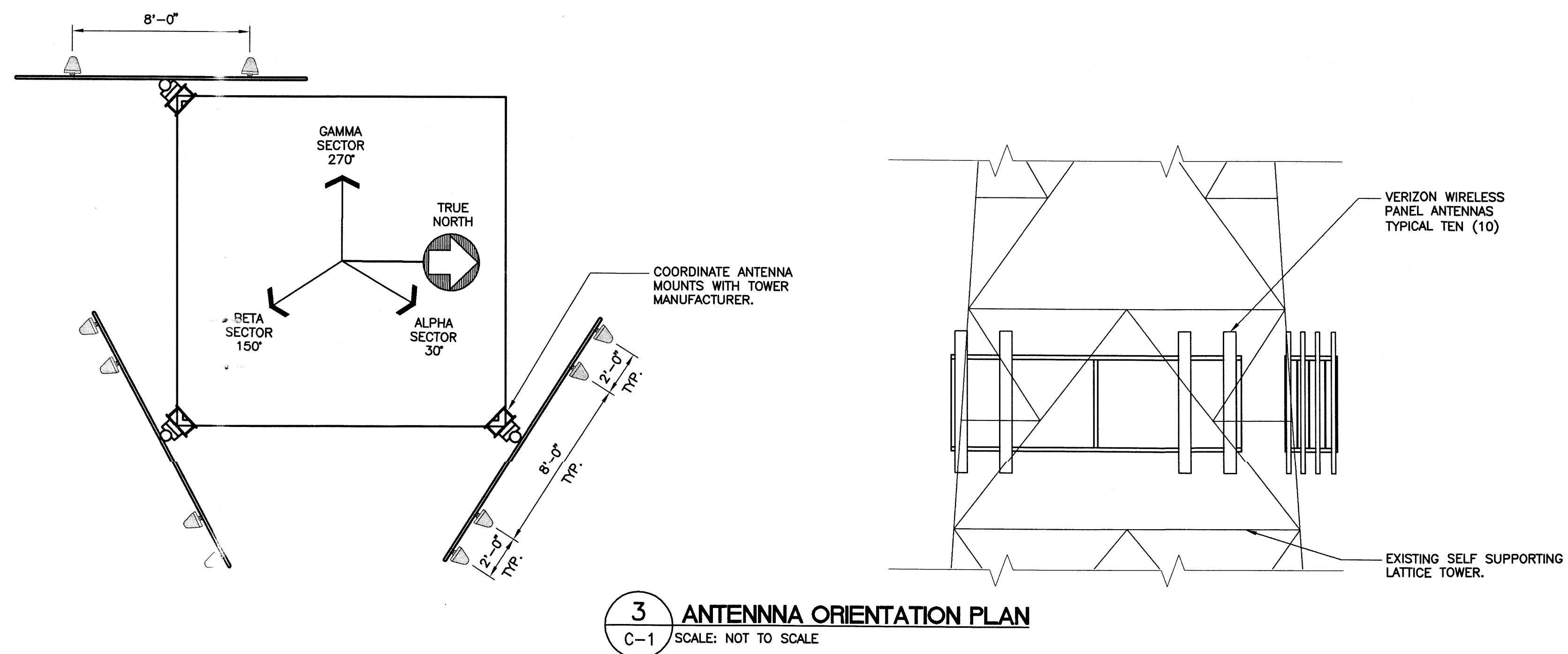
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DATE: 08/19/05

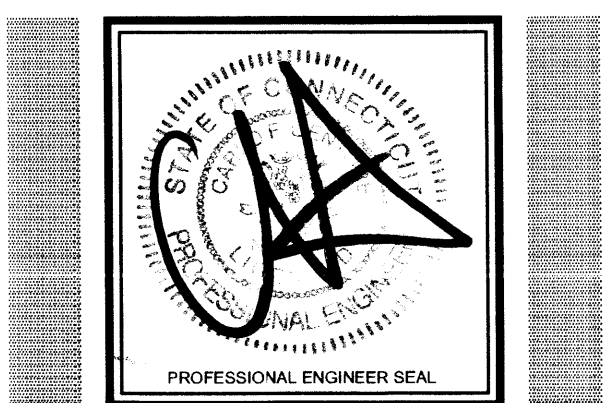
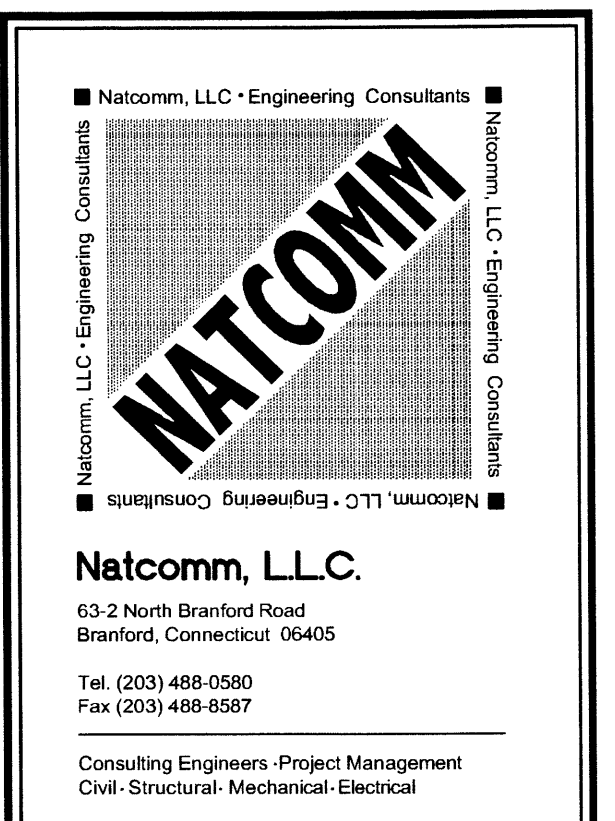
TITLE
SHEET

T-1

DWG. 1 OF 14

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NEW FAIRFIELD

TITICUS MNT. RD.
NEW FAIRFIELD, CONNECTICUT

PROJECT NO:	05073
DRAWN BY:	DFB
CHECKED BY:	CFC
SCALE:	AS NOTED
DATE:	08/19/05

COMPOUND
PLAN AND TOWER
ELEVATION

C-1

DWG. 2 OF 14

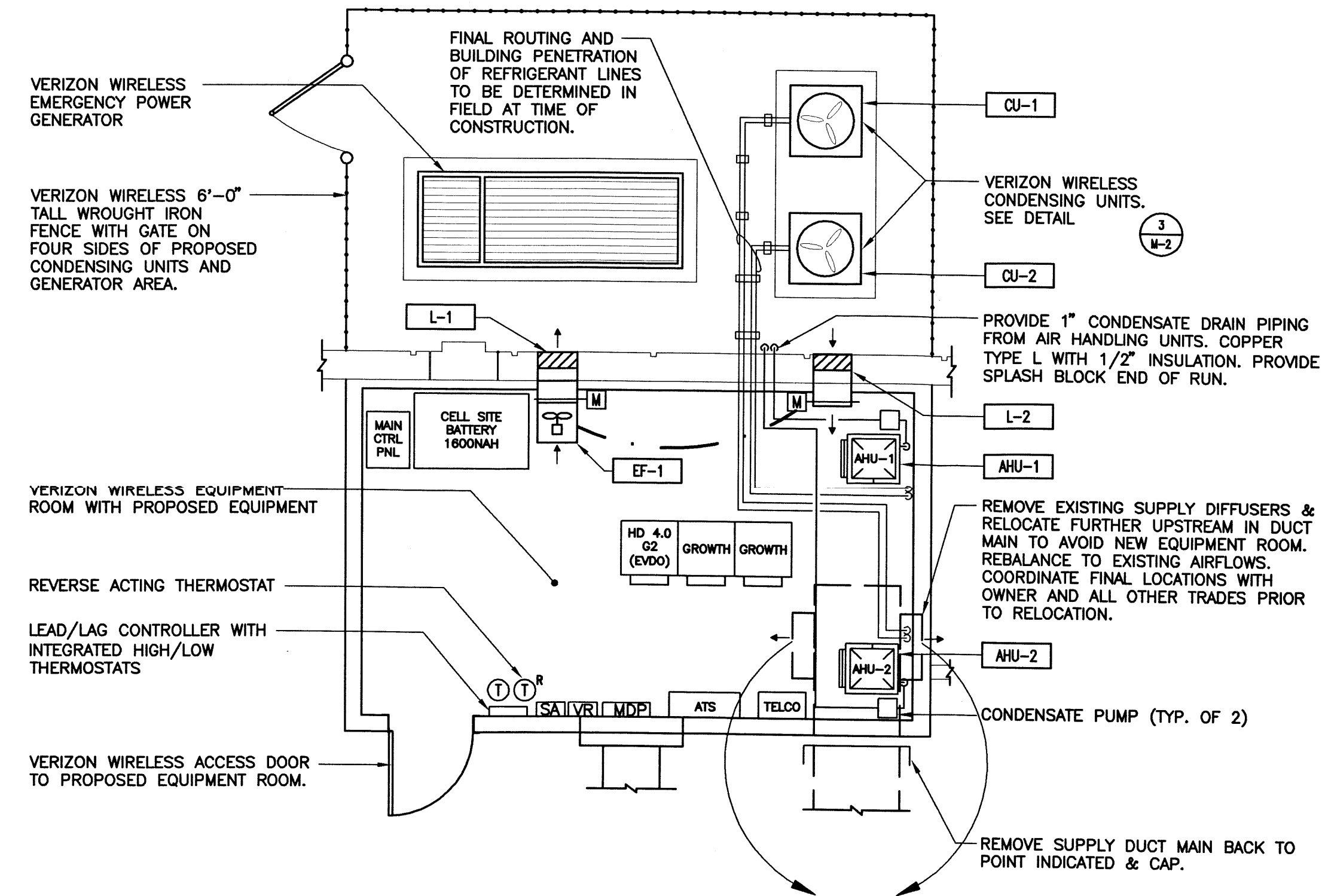


1. GATE POST, CORNER, TERMINAL OR PULL POST 2 1/2" Ø SCHEDULE 40 FOR GATE WIDTHS UP THRU 6 FEET OR 12 FEET FOR DOUBLE SWING GATE PER ASTM-F1083.
2. LINE POST: 2" Ø SCHEDULE 40 PIPE PER ASTM-F1083.
3. GATE FRAME: 1 1/2" Ø SCHEDULE 40 PIPE PER ASTM-F1083.
4. TOP RAIL & BRACE RAIL: 1 1/2" Ø SCHEDULE 40 PIPE PER ASTM-F1083.
5. FABRIC: 12 GA. CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392.
6. TIE WIRE: MINIMUM 11 GA. GALVANIZED STEEL AT POSTS AND RAILS A SINGLE WRAP OF FABRIC TIE AND AT TENSION WIRE BY HOG RINGS SPACED MAX 24" INTERVALS.
7. TENSION WIRE: 7 GA. GALVANIZED STEEL.
8. BARBED WIRE: DOUBLE STRAND 12-1 1/2" O.D. TWISTED WIRE TO MATCH W/FABRIC 14 GA., 4 PT. BARBS SPACED ON APPROXIMATELY 5" CENTERS.
9. GATE LATCH: DROP DOWN LOCKABLE FORK LATCH AND LOCK, KEYED ALIKE FOR ALL SITES IN A GIVEN MTA.
10. LOCAL ORDINANCE OF BARBED WIRE PERMIT REQUIREMENT SHALL BE COMPLIED WITH IF REQUIRED.
11. HEIGHT = 6" VERTICAL + 1' BARBED WIRE VERTICAL DIMENSION.

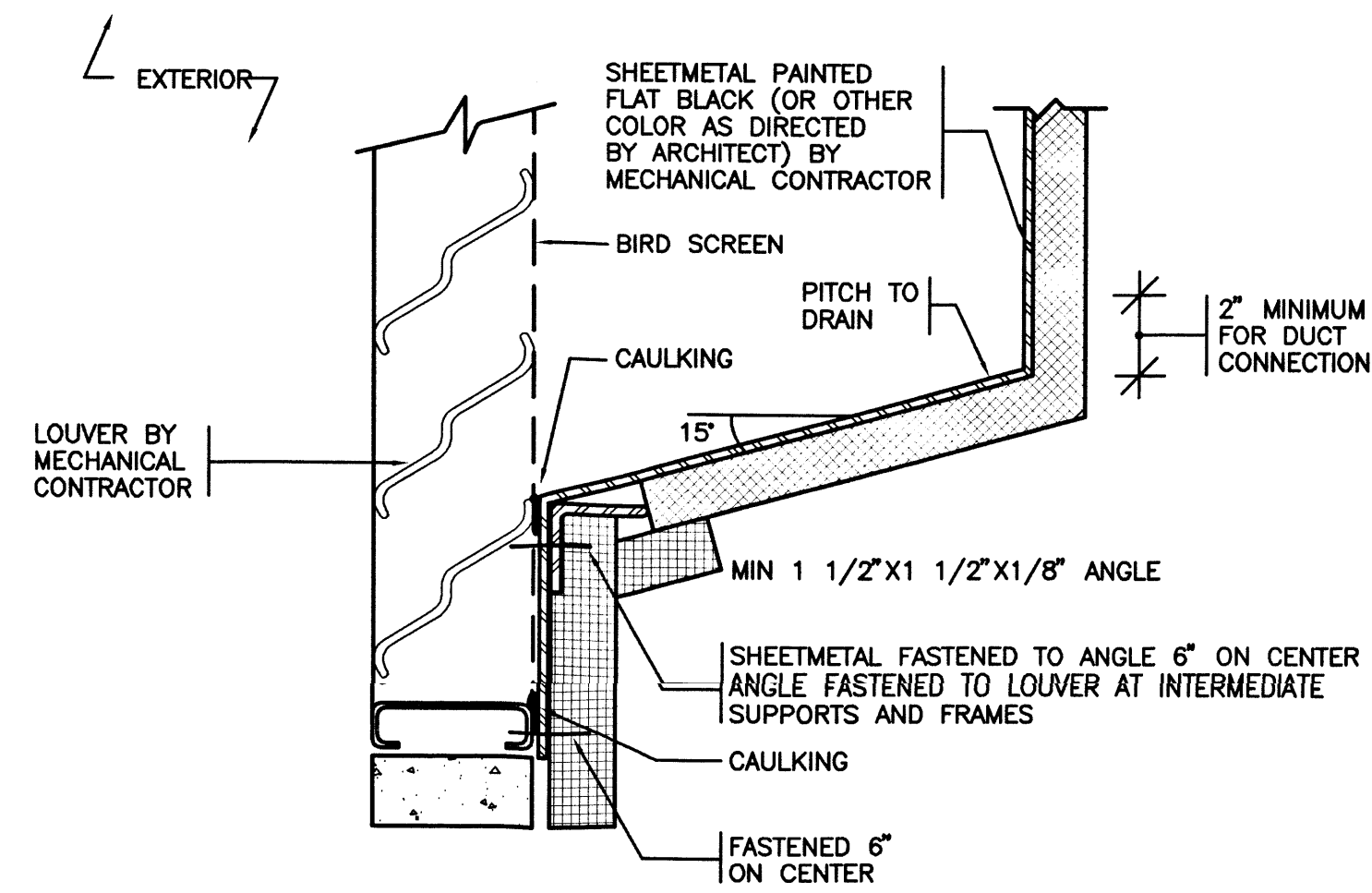
C-3

DWG. 4 OF 14

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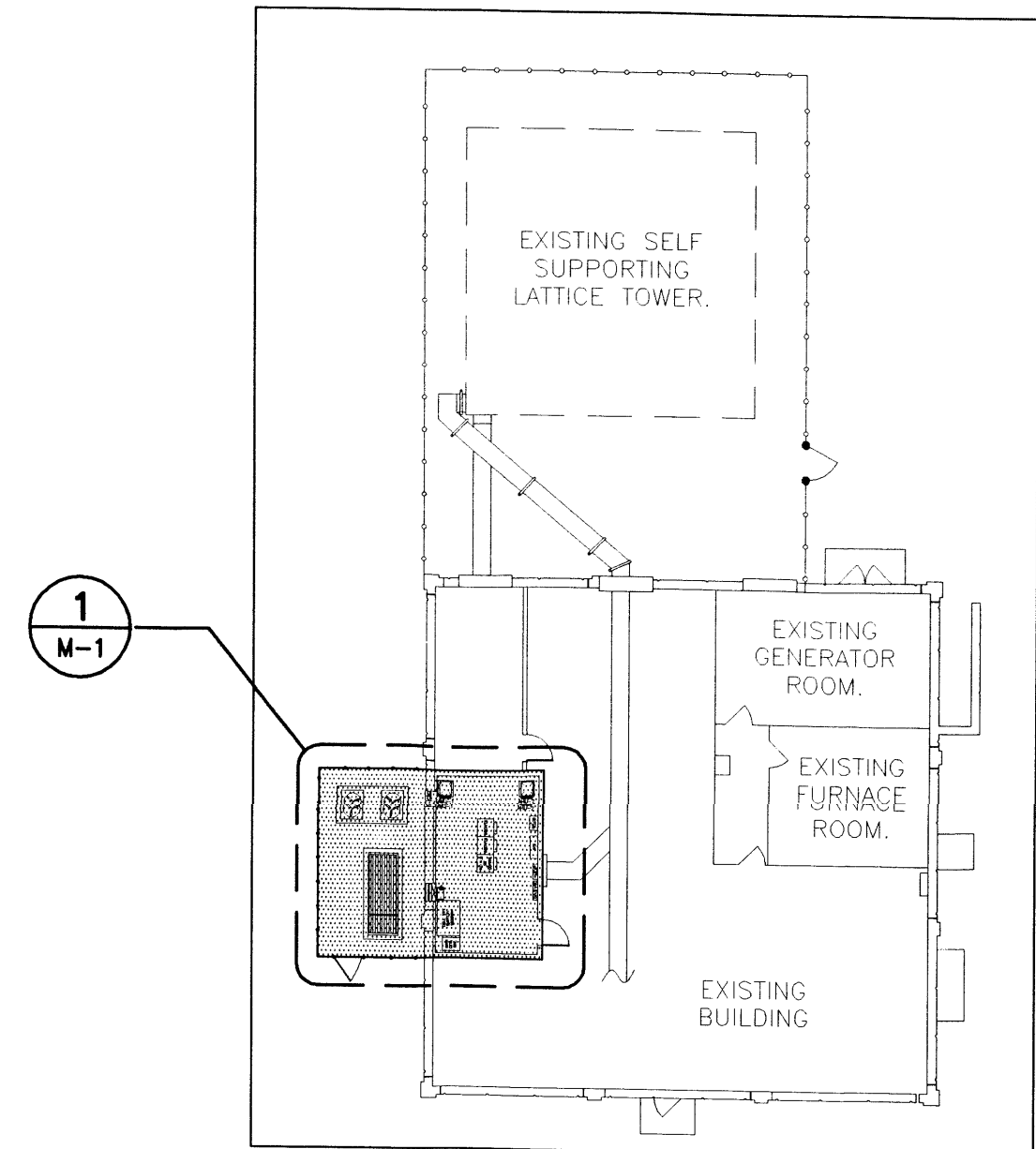


1 MECHANICAL PLAN
M-1 SCALE: 1/4" = 1'-0"



NOTES:
○ SUPPORT PLENUM FROM FLOOR OR STRUCTURE ABOVE W/GALVANIZED STEEL ANGLES AND CHANNELS.

2 PLENUM LOUVER CONNECTION
M-1 N.T.S.



3 SITE KEY PLAN
M-1 N.T.S.

REVISIONS		
00	08/19/05	BUILDING PERMIT

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Natcomm, LLC - Engineering Consultants

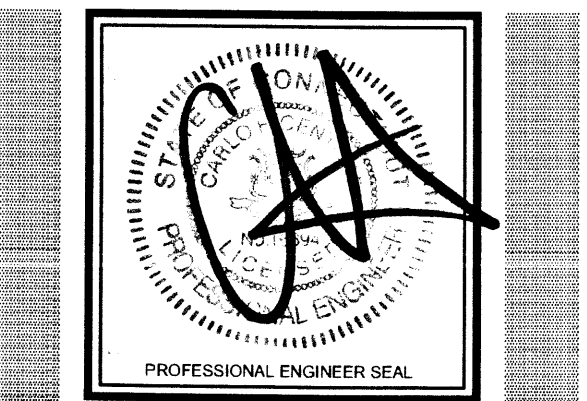
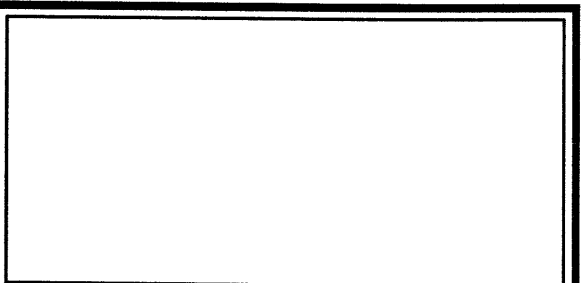
NATCOMM

Natcomm, L.L.C.

63-2 North Branford Road
Branford, Connecticut 06405

Tel. (203) 488-0580
Fax (203) 488-8507

Consulting Engineers - Project Management
Civil - Structural - Mechanical - Electrical



NEW FAIRFIELD

TITICUS MNT. RD.
NEW FAIRFIELD, CONNECTICUT

PROJECT NO:	05073
DRAWN BY:	KHS
CHECKED BY:	FRC
SCALE:	AS NOTED
DATE:	08/19/05

MECHANICAL
PLAN

M-1

DWG. 5 OF 14

	DOUBLE LINE DUCTWORK
	FLEXIBLE DUCTWORK
	MANUAL VOLUME DAMPER
	RECTANGULAR RETURN/EXHAUST DUCT RISER
	RECTANGULAR SUPPLY AIR GRILLE
	RECTANGULAR RETURN AIR GRILLE
	WALL MOUNTED THERMOSTAT
	REVERSE ACTING THERMOSTAT
	90 DEGREE SQUARE ELBOW WITH TURNING VANES
	RECTANGULAR TO ROUND CONCENTRIC TRANSITION
	PIPE RISER
	PIPE DROP
	INTAKE VENTILATOR
	EXHAUST FAN
	LOUVER
	MOTORIZED DAMPER
	BACK DRAFT DAMPER
	GAS COCK VALVE
	AHU AUTOMATIC CHANGE-OVER CONTROL PANEL
	LOCAL ALARM LIGHT
	FIRE DAMPER WITH ACCESS DOOR
	GAS PIPING
	REFRIGERANT SUCTION LINE
	REFRIGERANT LIQUID LINE
	PRESSURE REGULATOR

AFF	ABOVE FINISHED FLOOR	AHU	AIR HANDLING UNIT
BTU	BRIATH THERMAL UNIT	MBH	BTU PER HOUR (THOUSAND)
CFM	CUBIC FEET PER MINUTE		HEATING RATING
EAT	ENTERING AIR TEMPERATURE	Typ	TYPICAL
EXP	EXHAUST FAN	V	VOLTS
ESP	EXTERNAL STATIC PRESSURE	VEL	VELOCITY
FPM	FEET PER MINUTE	W	WATT
HP	HORSEPOWER	WB	WET-BULB
KW	KILOWATTS	WB	WET BULB
LAT	LEAVING AIR TEMPERATURE	CP	CONTROL PANEL
REF	REFRIGERANT LIQUID LINE	L	LOUVER
RSL	REFRIGERANT SUCION LINE	FC	FLEX CONNECTION

SYMBOL	MAKE	MODEL NUMBER	CFM	VELOCITY FT/MIN	FREE AREA SF	NOM. WIDTH IN	NOM. HEIGHT IN	PD IN. WG	REMARKS
L-1,2	GREENHECK	ESJ-401	167	285	.43	14	14	0.10	1,2,3

REMARKS:
 1. PROVIDE WITH BIRD SCREEN.
 2. PROVIDE WITH EXTENDED SILL.
 3. PROVIDE WITH BAKED ENAMEL FINISH. COLOR TO BE SELECTED BY ARCHITECT OR OWNER.

SYMBOL	MAKE	MODEL NUMBER	CFM	ESP IN/WG	MOTOR DATA HP-VOLT-PH	DRIVE TYPE	REMARKS
EF-1	GREENHECK	SI-8-440-D	167	0.25	1/25-120-1	BELT	ALL

REMARKS:

1. PROVIDE SERVICE SWITCH.
2. PROVIDE WITH BACKDRAFT DAMPER.
3. POWER FED FROM INVERTOR CONNECTED TO EMERGENCY BATTERIES. COORDINATE WITH ELECTRICAL CONTRACTOR
4. PROVIDE WALL MOUNT HOUSING, FAN GUARD, GRAVITY BACKDRAFT DAMPER.
5. COORDINATE SIZE WITH WALL OPENING
6. SET TO CYCLE 10 MIN/HR (ADJUSTABLE)
7. PROVIDE TIMER
8. COORDINATE LOCATION WITH OTHER TRADES

SYMBOL	MAKE	MODEL NUMBER	TYPE	SYSTEM SERVED	TOTAL CAP. MBH	SENS. CAP. MBH	SUCTION TEMP	AMB AIR TEMP DEG F	ELECTRICAL DATA MCA—VOLT—PH	REMARKS
CU-1	CARRIER	38CKC060301	AC	AHU-1	57	45	42.5	91.0	—	SEE NOTES
CU-2	CARRIER	38CKC060301	AC	AHU-2	57	45	42.5	91.0	—	SEE NOTES
TYPES: AC—AIR COOLED REMARKS: 1. PROVIDE WITH UNIT MOUNTED FUSED DISCONNECT SWITCH 2. PROVIDE WITH LIQUID & SUCTION LINE, FILTER DRYERS, SIGHT GLASS AND ALL OTHER REFRIGERANT SPECIALTIES. 3. PROVIDE WITH LOW AMBIENT HEAD PRESSURE CONTROL, ANTI SHORT CYCLING TIMER. 4. PROVIDE WITH CRANKCASE HEATER. 5. PROVIDE WITH REFRIGERANT SOLENOID VALVE 6. PROVIDE WITH REFRIGERANT SOLENOID VALVE COIL. 7. PROVIDE WITH LOW PRESSURE SWITCH.										

SYMBOL	MAKE	MODEL NUMBER	TYPE	CFM	CFM O.A.	ESP IN. WG	MOTOR DATA AMP-VOLT-PH	COOLING COIL TYPE	COOLING CAPACITY TOTAL MBH	COOLING CAPACITY SENS. MBH	EAT DB/WB (DEG F)	LAT DB/WB (DEG F)	HEATING CAPACITY TOTAL MBH	TYPE	KW	REMARKS
AHU-1	CARRIER	FB4BNF060C05AEA	V	2000	0	—	3.6/208/1	DX	57	45	77/65	55/53	15.7	ELEC.	5	SEE NOTES
AHU-2	CARRIER	FB4BNF060C05AEA	V	2000	0	—	3.6/208/1	DX	57	45	77/65	55/53	15.7	ELEC.	5	SEE NOTES

REMARKS:

1. PROVIDE WITH COMBINATION MOTOR STARTER/FUSED DISCONNECT SWITCH.
2. MAXIMUM COIL FACE VELOCITY SHALL BE 500 FPM
3. PROVIDE WITH 1" 30% AIR FILTER.
4. PROVIDE LEAD/LAG CONTROLLER WITH INTEGRAL THERMOSTAT.
5. COORDINATE HUMIDISTAT MODEL # WITH VERIZON WIRELESS.
6. PROVIDE WITH FREEZESTAT.
7. PROVIDE FLOOR MOUNTED CONDENSATE PUMPS FOR EACH AC UNIT EQUIPPED WITH CHECK VALVE AND INTEGRAL SUMP PUMP LITTLE GIANT MODEL VCL-24, RATED AT 120/60 HZ/1½ 15 GPH @ 10 FEET OF HEAD.
8. PROVIDE WITH SEISMIC ISOLATORS.



M-2

DWG. 6 OF 14

MECHANICAL SPECIFICATIONS

SCOPE

THE WORK TO BE DONE UNDER THIS DIVISION OF THE SPECIFICATIONS INCLUDE THE FURNISHING OF ALL EQUIPMENT, SUPPLIES, LABOR, SUPERVISION AND ALL MATERIALS NOT SPECIFICALLY MENTIONED, READY FOR USE, PLUMBING, HEATING, VENTILATION, AIR CONDITIONING EQUIPMENT AND ASSOCIATED ITEMS AND ALL TEMPERATURE CONTROL OR EMS COMPONENTS. IT IS THE INTENTION OF THE SPECIFICATIONS AND DRAWINGS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION.

IT IS THE INTENT THAT ALL MECHANICAL WORK AND MATERIALS NECESSARY TO COMPLETE THE ENTIRE PROJECT IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS, WHERE SPECIFICALLY MENTIONED HERE, OR NOT, SHALL BE FURNISHED. ALL WORK AND MATERIALS NECESSARY TO FULFILL THIS INTENT SHALL BE SUPPLIED UNDER THE MECHANICAL SPECIFICATIONS WITHOUT ADDITIONAL COST TO THE OWNER.

CODES, RULES, PERMITS AND FEES

THIS CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS AND PAY ALL STATE AND LOCAL TAXES, FEES AND OTHER COSTS IN CONNECTION WITH HIS WORK; FILE ALL NECESSARY PLANS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL STATE AND LOCAL DEPARTMENTS HAVING JURISDICTION; OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK AND DELIVERY OF SAME TO THE OWNER BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.

THIS CONTRACTOR SHALL INCLUDE IN THE WORK, WITHOUT EXTRA COST TO THE OWNER, ANY LABOR, MATERIALS, SERVICES, APPARATUS, DRAWINGS (IN ADDITION TO CONTRACT DRAWINGS AND DOCUMENTS), IN ORDER TO COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES AND REGULATIONS WHETHER OR NOT SHOWN ON THE DRAWINGS AND/OR SPECIFIED.

THIS CONTRACTOR SHALL PERFORM AND FILE ALL TESTS IN ACCORDANCE WITH CURRENT REGULATIONS OF THE STATE AND LOCAL AUTHORITIES. HE SHALL FURNISH AND INSTALL SIGNS REQUIRED BY THE STATE AND LOCAL AUTHORITIES.

ALL MATERIALS FURNISHED AND ALL WORK INSTALLED SHALL COMPLY WITH THE RULES AND RECOMMENDATIONS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, WITH ALL REQUIREMENTS OF LOCAL UTILITIES COMPANIES, WITH THE RECOMMENDATIONS OF THE FIRE INSURANCE RATING ORGANIZATION HAVING JURISDICTION.

REGULATIONS

ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH STATE BASIC BUILDING CODE, B.O.C.A., STATE FIRE SAFETY CODE, A.D.A., U.L., NEMA, O.S.H.A., NATIONAL PLUMBING CODE AND NFPA, WITH ALL REQUIREMENTS OF ALL GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION. REQUIREMENTS OF THE ABOVE SHALL TAKE PRECEDENCE OVER PLANS AND SPECIFICATIONS.

GUARANTEE AND SERVICE

THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE INSTALLATION. IN ADDITION, THE CONTRACTOR SHALL PROVIDE, FREE OF CHARGE, ONE YEAR'S MAINTENANCE GUARANTEE OF MAINTAINED SERVICE AND ADJUSTMENT OF ALL EQUIPMENT IN THIS CONTRACT.

DRAWINGS AND INTENT

DRAWINGS ARE INTENDED AS WORKING DRAWINGS FOR GENERAL LAYOUT OF THE VARIOUS ITEMS OF EQUIPMENT. HOWEVER, LAYOUT OF EQUIPMENT, ACCESSORIES, SPECIALTIES, AND PIPING SYSTEMS ARE DIAGRAMMATIC UNLESS SPECIFICALLY DIMENSIONED, AND DO NOT NECESSARILY INDICATE EVERY REQUIRED PIPE, VALVE, FITTINGS, TRAP, ELBOW, TRANSITION, OFFSETS, JUNCTION OR PULLBOX, OR SIMILAR ITEMS REQUIRED FOR A COMPLETE INSTALLATION.

WORK NOT INCLUDED

ALL ELECTRICAL WORK, CUTTING AND PATCHING, PIERS, UNTELS, ALL CONCRETE WORK AND ALL PAINTING.

THIS CONTRACTOR SHALL FURNISH THE GENERAL CONTRACTOR WITH THE SIZES AND LOCATIONS OF CHASES AND OPENINGS WHICH OCCUR IN WALLS, PARTITIONS, FLOORS, ETC., REQUIRED FOR THE INSTALLATION OF THE WORK CALLED FOR UNDER THIS CONTRACT, WHICH BE DONE BY THE GENERAL CONTRACTOR, EXCEPT CUTTING REQUIRED FOR THE INSTALLATION OF HANGERS.

MEASUREMENTS

ALL MEASUREMENTS TAKEN AT THE BUILDING SHALL TAKE PRECEDENCE OVER SCALE DIMENSIONS. EVERY PART OF THE PLANS SHALL BE FITTED TO THE ACTUAL CONDITIONS AT THE BUILDING. IF IN CONFLICT WITH SCALE DIMENSIONS, CONTACT ARCHITECT FOR CLARIFICATION.

INTERRUPTION OF EXISTING SERVICES

PRIOR TO PERFORMING WORK REQUIRING INTERRUPTION OF EXISTING SERVICES, THE CONTRACTOR SHALL SECURE FROM THE OWNER, APPROVAL OF THE PROPOSED OPERATION. (72 HOURS IN ADVANCE WHENEVER POSSIBLE).

WORK SHALL BE ARRANGED FOR CONTINUOUS PERFORMANCE WHENEVER POSSIBLE. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, INCLUDING OVERTIME, IF REQUIRED, TO ASSURE THAT EXISTING OPERATING SERVICES WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE NECESSARY CONNECTIONS.

PROTECTION OF FIXTURES, MATERIALS AND EQUIPMENT

CLOSE PIPE OPENINGS WITH CAPS OR PLUGS DURING INSTALLATION. TIGHTLY COVER AND PROTECT FIXTURES AND EQUIPMENT AGAINST DIRT, WATER AND CHEMICAL OR MECHANICAL INJURY. AT COMPLETION OF ALL WORK, FIXTURES, EXPOSED MATERIALS AND EQUIPMENT SHALL BE THOROUGHLY CLEANED.

DEMOLITION

CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, ETC., REQUIRED TO COMPLETE ALL DEMOLITION WORK NECESSARY FOR THE FULL COMPLETION OF THIS CONTRACT. PROTECT ALL PARTS AND EQUIPMENT THAT ARE TO REMAIN. ASSUME FULL RESPONSIBILITY FOR DAMAGE.

ALL ITEMS BEING REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE INDICATED BY HIM. EQUIPMENT AND DEVICES THE OWNER DOES NOT WISH TO RETAIN SHALL BECOME THE PROPERTY OF THIS CONTRACTOR AND REMOVED FROM THE SITE. ALL MATERIAL CHOSEN TO BE RETAINED BY THE OWNER SHALL BE DELIVERED BY THE CONTRACTOR TO SUCH POINT AS DESIGNATED BY THE OWNER.

EXAMINATION OF PREMISES - SPECIAL NOTE

NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED FOR FAILURE TO VISIT SITE, OR FOR ANY ALLEGED MISUNDERSTANDING OF MATERIALS TO BE FURNISHED, OR WORK TO BE DONE, IT BEING THAT TENDER OF THE PROPOSAL INDICATED WITH IT AGREEMENT TO ITEMS AND CONDITIONS REFERRED TO HEREIN OR INDICATED ON AFOREMENTIONED DRAWINGS.

SCAFFOLDING, RIGGING AND HOISTING

UNLESS OTHERWISE SPECIFIED, CONTRACTOR SHALL FURNISH ALL SCAFFOLDING, RIGGING, HOISTING AND SERVICES NECESSARY FOR ERECTION AND DELIVERY INTO THE PREMISES OF ANY EQUIPMENT AND APPARATUS FURNISHED. REMOVE SAME FROM THE PREMISES WHEN NO LONGER REQUIRED.

HOUSEKEEPING

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING STOCK OF MATERIALS AND EQUIPMENT STORED ON PREMISES IN A NEAT AND ORDERLY MANNER AND, AT ALL TIMES, KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH CAUSED BY HIS EMPLOYEES AT WORK. HE SHALL REMOVE HIS RUBBISH AND SURPLUS MATERIALS FROM THE JOB SITE AND SHALL LEAVE THE PREMISES AND HIS WORK IN A CLEAN AND PERFECT CONDITION.

QUIET OPERATION

ALL WORK SHALL OPERATE UNDER ALL CONDITIONS OF LOAD WITHOUT ANY SOUND OR VIBRATION WHICH IS OBJECTIONABLE IN THE OPINION OF THE CONSTRUCTION MANAGER. IN CASE OF MOVING MACHINERY, SOUND OR VIBRATION NOTICEABLE OUTSIDE OF ROOM IN WHICH IT IS INSTALLED, OR ANNOYING INSIDE ITS OWN ROOM, WILL BE CONSIDERED OBJECTIONABLE BY THE CONSTRUCTION MANAGER AND SHALL BE REMEDIED IN APPROVED MANNER BY CONTRACTOR AT HIS EXPENSE.

SHOP DRAWINGS

PRIOR TO DELIVERY TO JOB SITE, BUT SUFFICIENTLY IN ADVANCE OF REQUIREMENTS NECESSARY TO ALLOW CONSTRUCTION MANAGER AMPLE TIME FOR REVIEW, CONTRACTOR SHALL SUBMIT FOR APPROVAL, SEVEN (7) COPIES EACH OF SHOP DRAWINGS OF ALL EQUIPMENT. ALSO, SHEET METAL FABRICATION DRAWINGS DRAWN TO A SCALE OF 1/4" TO THE FOOT OR LARGER.

ADJACENT TENANTS

WORK IN ADJACENT OCCUPIED TENANT SPACES SHALL NOT BE SCHEDULED DURING NORMAL WORK HOURS.

EQUIPMENT DEVIATION

THE PLANS AND/OR SPECIFICATIONS INDICATE THE NAME, MODEL NUMBER OR TYPE OF EQUIPMENT OR MATERIALS SPECIFIED. SHOULD THE BIDDER DESIRE TO USE EQUIPMENT OR MATERIALS OR A MAKE OTHER THAN THOSE SPECIFIED OR SHOWN, HE SHALL ATTACH A RIDER TO THE BID FORM LISTING THE DEDUCTIONS AND/OR ADDITIONS TO HIS BASE BID, TOGETHER WITH THE MANUFACTURER'S NAME AND MODEL NUMBERS OF THE EQUIPMENT OR MATERIALS HE PROPOSED TO FURNISH AS "SUBSTITUTES". IF NO SUBSTITUTE INFORMATION IS FURNISHED, IT WILL BE EXPRESSLY UNDERSTOOD THAT ALL EQUIPMENT AND MATERIALS NAMED WILL BE FURNISHED IN FULL ACCORDANCE WITH THE PLANS AND/OR SPECIFICATIONS.

CORE DRILLING/WATERPROOFING

ALL CORE DRILLING REQUIRED SHALL BE DONE BY GENERAL CONTRACTOR. ALL ROOF PENETRATIONS, FLASHING AND WATER PROOFING SHALL BE DONE BY GENERAL CONTRACTOR, WORK SHALL BE PERFORMED BY AAN APPLICATOR CERTIFIED BY THE EXISTING ROOF SYSTEM MANUFACTURER.

RECORD DRAWINGS

CONTRACTOR SHALL KEEP ACCURATE RECORD OF ALL DEVIATIONS IN WORK AS ACTUALLY INSTALLED FROM WORK INDICATED PAYING PARTICULAR ATTENTION TO DIMENSIONING OUTSIDE UNDERGROUND UTILITY LINES, THEIR OFFSETS AND VALUES.

OWNER'S INSTRUCTIONS AND SYSTEM OPERATION

AT THE TIME OF THE JOB'S ACCEPTANCE BY OWNER, CONTRACTOR SHALL FURNISH ONE COMPLETE SET OF APPROVED CERTIFIED DRAWINGS TO THE OWNER. IN ADDITION, CONTRACTOR SHALL FURNISH MAINTENANCE AND OPERATING INSTRUCTIONS FOR ALL EQUIPMENT. THESE INSTRUCTIONS SHALL BE WRITTEN IN LAYMAN'S LANGUAGE AND SHALL BE INSERTED IN VINYL-COVERED THREE-RING LOOSE LEAF BINDER. THIS INFORMATION IN BINDER SHALL BE FIRST SENT TO AND APPROVED BY THE ARCHITECT/CONSTRUCTION MANAGER BEFORE TURNING OVER TO OWNER.

SEISMIC RESTRAINTS

SEISMIC RESTRAINTS DESIGNED AND CONSTRUCTED FOR LATERAL FORCES IN ANY DIRECTION SHALL BE PROVIDED FOR ALL MECHANICAL EQUIPMENT AND PIPING IN ACCORDANCE WITH THE STATE BUILDING CODE. SUBMIT SEISMIC RESTRAINT DESIGN AND CALCULATIONS STAMPED BY A CONNECTICUT LICENSED STRUCTURAL ENGINEER.

DUCT INSTALLATION

SIZES AND APPROXIMATE LOCATION OF ALL DUCTS ARE SHOWN ON THE DRAWINGS. CHECK CAREFULLY WITH THE ARCHITECTURAL DRAWINGS AND DRAWINGS SHOWING WORK OF OTHER TRADES TO MAKE SURE THAT THERE WILL BE NO CONFLICT BETWEEN THESE TRADES AND THE DUCTS. DUCTS SHALL BE OFFSET AS REQUIRED TO CLEAR STRUCTURAL MEMBERS, AND, IF NECESSARY, TO ALTER DIMENSIONS OF THE DUCT. THIS MAY BE DONE PROVIDED THE CROSS-SECTIONAL AREA IS IN NO CASE REDUCED.

DUCT INSULATION

WHERE INDICATED ON THE DRAWINGS, DUCTWORK SHALL BE LINED WITH MANVILLE PERMACOTE LINACOUSITIC. THICKNESS, UNLESS SPECIFIED OTHERWISE, SHALL BE 1". LINER SHALL BE APPLIED TO DUCT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND SMACNA GUIDELINES, LATEST EDITION. WHERE SOUND INSULATION IS INDICATED, DUCTWORK SIZES DENOTED ARE THE INSIDE DIMENSIONS AFTER THE INSULATION HAS BEEN INSTALLED. COVER ALL UNLINED OUTSIDE AIR DUCTWORK WITH 1-1/2" FIBERGLASS DUCT WRAP EQUAL TO MANVILLE R-SERIES MICROLITE WITH F.R.G. VAPOR BARRIER.

SHEET METAL DUCTWORK

ALL DUCTWORK SHALL BE CONSTRUCTED OF #1 QUALITY FIRST SHEETS OF GALVANIZED FIRST SHEETS OF GALVANIZED STEEL FREE OF CRACKS OR BLEMISHES. WHEN PITTSBURGING OR SNAP LOCKING A JOINT, THE GALVANIZING SHALL NOT BE CHIPPED OFF.

DUCTWORK AND ACCESSORIES

ALL DUCTWORK SHALL BE METAL AND ALL ASPECTS OF METAL DUCTWORK CONSTRUCTION, INCLUDING ALL FITTINGS AND COMPONENTS, SHALL COMPLY WITH THE LATEST EDITION OF SMACNA STANDARDS FOR 1" PRESSURE CLASS. ALL DUCTWORK DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS. ALL SQUARE DUCT ELBOWS ARE TO BE EQUIPPED WITH TURNING VANES. ALL RADIUSED DUCT ELBOWS SHALL HAVE MINIMUM CENTER LINE RADIUS EQUAL TO 1-1/2 TIMES THE DUCT WIDTH WHERE DUCT WIDTH IS DIMENSION IN DIRECTION OF RADIUS.

FLEXIBLE DUCT CONNECTORS APPROXIMATELY 6 INCHES IN LENGTH SHALL BE PROVIDED WHERE SHEET METAL CONNECTIONS ARE MADE TO AIR HANDLING EQUIPMENT.

MANUAL BALANCING DAMPERS SHALL BE PROVIDED FOR EACH BRANCH OF THE MAIN TRUNK DUCT AND AS INDICATED ON THE DRAWINGS. DAMPER CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF SMACNA STANDARDS.

AIR DEFLECTORS SHALL BE PROVIDED AT ALL DUCT MOUNTED SUPPLY OUTLETS, AT ALL TAKEOFF OR EXTENSION COLLARS TO SUPPLY OUTLETS, AT ALL DUCT BRANCH TAKEOFF CONNECTIONS, AND AT ALL 90 DEGREE ELBOWS. AS WELL AS AT ALL LOCATIONS SHOWN IN THE LATEST EDITION OF SMACNA STANDARDS. AS AN OPTION TO AIR DEFLECTORS, CONTRACTOR MAY PROVIDE FABRICATED TEES WITH 45 DEGREE ENTREES AT ALL RECTANGULAR BRANCHES AND CONICAL TEES AT ALL ROUND DUCT BRANCHES.

NO DIFFUSER, SWITCH OR THERMOSTAT, OR DEVICE SHALL BE PLACED WITHOUT THE FINAL APPROVAL OF THE OWNER AND THE ARCHITECT.

PIPING

CONDENSATE PIPING SHALL BE DRAWN TEMPER COPPER TUBING, ASTM B88 TYPE L.

REFRIGERANT PIPING SHALL BE HARD DRAWN ANNEALED ASTM B280, TYPE ACR. FITTINGS SHALL BE ASTM B16.22 WROUGHT COPPER.

PIPING SUPPORT

PIPING SUPPORT SHALL CONFORM TO ASME B31.5, ASTM F708.

PIPING INSULATION

PROVIDE FLEXIBLE ELASTOMERIC CELLULAR PIPING INSULATION ON REFRIGERANT AND CONDENSATE DRAIN PIPING. PROVIDE PVC JACKET ON EXPOSED PIPING AND FITTINGS.

TEST AND BALANCE

COMPLETELY TEST AND BALANCE ALL SUPPLY AND RETURN AIR SYSTEMS AND PROVE THE CAPACITIES OF THE SYSTEM AND THE SYSTEM COMPONENTS. SUBMIT RESULTS TO CONSTRUCTION MANAGER FOR APPROVAL.

TESTING AND BALANCING SHALL BE PERFORMED BY A CERTIFIED MEMBER OF EITHER AABC OR NEBB IN ACCORDANCE WITH THE LATEST STANDARDS OF ITS RESPECTIVE ORGANIZATIONS.

TESTS

THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, DURING THE PROGRESS OF THE WORK OR UPON ITS COMPLETION AS DIRECTED, MAKE SUCH TESTS OF HIS WORK AS ARE HEREIN SPECIFIED OR AS ARE REQUIRED BY AND IN THE PRESENCE OF THE BUILDING INSPECTOR. IF SO DIRECTED, TESTS SHALL BE MADE OF SECTIONS FOR THE WORK SO AS NOT TO DELAY THE WORK OR OTHER TRADES.

THE CONTRACTOR SHALL PROVIDE ALL APPARATUS, TEMPORARY WORK OR ANY OTHER REQUIREMENTS NECESSARY FOR SUCH TESTS. HE SHALL TAKE ALL DUE PRECAUTIONS TO PREVENT DAMAGE TO THE BUILDING OR ITS CONTENTS THAT MAY BE INCURRED BY SUCH TESTS AS HE WILL BE REQUIRED TO REPAIR AND MAKE GOOD, AT HIS OWN EXPENSE, ANY DAMAGE CAUSED.

ANY DEFECTS OR DEFICIENCIES DISCOVERED AS A RESULT OF TESTS SHALL BE IMMEDIATELY REPAIRED AND TESTS SHALL BE REPEATED UNTIL THE TEST REQUIREMENTS ARE FULLY COMPLIED WITH.

NO CAULKING OF PIPE JOINTS TO REMEDY LEAKS WILL BE PERMITTED.

ALL WATER PIPING SHALL BE TESTED TO A HYDROSTATIC PRESSURE OF 150 POUNDS PER SQUARE INCH. PRESSURE SHALL BE MAINTAINED WITHOUT PUMPING FOR TWO HOURS.

TESTS SHALL BE PERFORMED IN THE PRESENCE OF AND TO THE SATISFACTION OF THE ARCHITECT, AND LOCAL DEPARTMENT REPRESENTATIVES.

THE CONTRACTOR SHALL NOTIFY THE ARCHITECT TWO DAYS IN ADVANCE OF RUNNING TESTS TO ALLOW THEIR REPRESENTATIVE TO BE PRESENT TO WITNESS TESTS. NOTIFICATION TO BE IN WRITING.

HANGER AND SUPPORTING

HANGING AND SUPPORTING - PIPING SHALL NOT BE SUPPORTED BY OTHER PIPING, BUT SHALL BE SUPPORTED WITH COPPER PIPE HANGERS SUITABLE FOR THE SIZE OF PIPE AND PROPER STRENGTH AND QUALITY AT PROPER INTERVALS SO THAT PIPING CANNOT BE MOVED ACCIDENTALLY FROM THE INSTALLED POSITION.

SEQUENCE OF OPERATION

PROVIDE ALL CONTROLS, LOW VOLTAGE CONTROL WIRING AND ACCESSORIES NECESSARY TO ACCOMPLISH THE SEQUENCE OF OPERATION AS INDICATED BELOW. POWER WIRING SHALL BE PROVIDED IN ACCORDANCE WITH ELECTRICAL SPECIFICATIONS. COORDINATE WITH ELECTRICAL CONTRACTOR.

AIR HANDLING UNITS

1. AHU-1, AHU-2 - AIR HANDLING UNITS SERVING THE EQUIPMENT ROOM SHALL BE CONSTANT VOLUME UNITS.

A. THERMOSTATS SHALL LOCALLY CONTROL THE AHU ON A CALL FOR HEATING AND COOLING. THE SUPPLY FAN SHALL RUN CONTINUOUSLY.

B. THERMOSTATS SHALL INCLUDE THE FOLLOWING FUNCTIONS. HEATING/COOLING MODE SELECTION SWITCH AND AN ON/OFF/AUTO FAN CONTROL SWITCH, AND AUTO-CHANGE OVER.

C. AHU-1 OR AHU-2 SHALL OPERATE AS THE LEAD AHU TO MAINTAIN DESIRED SPACE TEMPERATURE (ADJUSTABLE). THE HIGH TEMPERATURE CHANGEOVER THERMOSTAT (HTCT) SHALL BE SET +10 DEGREES ABOVE AHU TEMPERATURE SETPOINTS (ADJUSTABLE). IF THE SPACE EXCEEDS THIS 10 DEGREE DIFFERENTIAL, THE HTCT SHALL SIGNAL THE AHU ALTERNATING CHANGEOVER CONTROL PANEL TO SHUT DOWN THE LEAD AHU AND START UP THE BACKUP AHU. THE AHU ALTERNATING CHANGEOVER CONTROL PANEL SHALL ALTERNATE THE LEAD AND BACKUP AHU'S EVERY 1,000 HOURS OF OPERATION. UPON AN AHU TEMPERATURE OR OPERATION FAILURE, A LOCAL ALARM SHALL BE GENERATED. BOTH AHU'S SHALL BE EQUIPPED WITH A PROOF OF FAN SWITCH. IF AN AHU IS ACTIVATED AND THE FAN SWITCH IS NOT MADE, THE AHU'S SHALL SWITCH OVER AND A LOCAL ALARM SHALL BE GENERATED.

D. CONDENSATE PUMPS - EACH CONDENSATE PUMP SHALL BE EQUIPPED WITH A DRIP PAN WITH FLOAT SENSOR. IF A CONDENSATE PUMP FAILS AND THE DRIP PAN FILLS WITH WATER, THE ASSOCIATED AHU SHALL BE DEACTVATED. IF THE AHU IS DEACTIVATED, THE BACKUP AHU SHALL SWITCH OVER TO THE LEAD AHU AND A LOCAL ALARM SHALL BE GENERATED.

E. AIR INTAKE DAMPER - AIR INTAKE DAMPER SHALL OPERATE WITH ACTIVE EXHAUST FAN AND SHALL CLOSE WHEN EXHAUST FAN IS DEACTIVATED.


2. EF-1 - EXHAUST FAN SHALL:

CYCLE INTERMITTENTLY (10 MIN/HR) BY MEANS OF MARK TIME SWITCH AND REVERSE ACTING T-STAT. INTERLOCK INTAKE DAMPER AND EXHAUST FAN MOTOR

REVERSE ACTING THERMOSTAT SHALL ENERGIZE EXHAUST FAN AT A PRESET TEMPERATURE OF 78F.

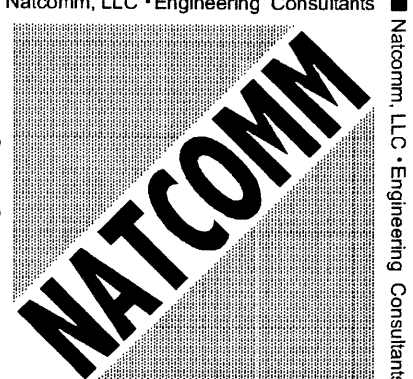
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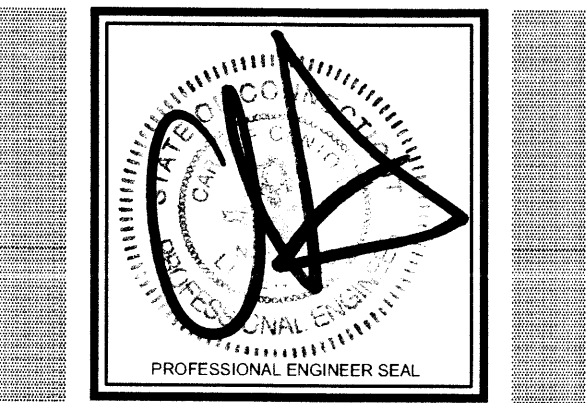
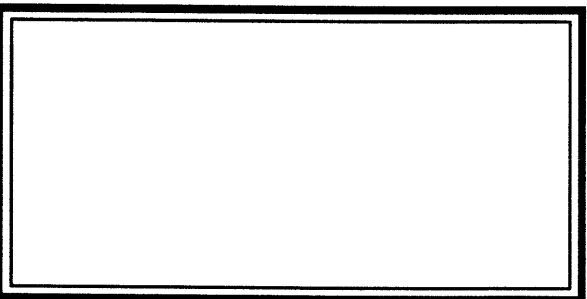
Natcomm, LLC - Engineering Consultants



Natcomm, LLC - Engineering Consultants

Natcomm, L.L.C.
63-2 North Branford Road
Branford, Connecticut 06405
Tel. (203) 488-0580
Fax (203) 488-8587

Consulting Engineers - Project Management
Civil - Structural - Mechanical - Electrical



NEW FAIRFIELD

TITICUS MNT. RD.
NEW FAIRFIELD, CONNECTICUT

PROJECT NO:	05073
DRAWN BY:	KHS
CHECKED BY:	FRC
SCALE:	AS NOTED
DATE:	08/19/05

MECHANICAL
SPECIFICATIONS

M-3

DWG. 7 OF 14

CELLULAR GROUNDING NOTES

OBJECTIVE

PROVIDE A CELLULAR GROUNDING SYSTEM WITH MAXIMUM ALTERNATING CURRENT RESISTANCE OF 5 OHMS BETWEEN ANY POINT ON THE GROUNDING SYSTEM AND REFERENCE GROUND. PROVIDE EXTERIOR GROUNDING SCHEME WITH VERIZON WIRELESS ENGINEER'S APPROVAL AS REQUIRED TO ACHIEVE DESIRED MAXIMUM AC RESISTANCE TO GROUND. CONNECT TO INTERIOR CELLULAR GROUNDING SYSTEM AS REQUIRED. PERFORM TESTING PROCEDURE AS DESCRIBED IN SPECS.

CONDUCTOR USED FOR CELLULAR GROUNDING SYSTEM

EGR - #2 AWG ANNEALED SOLID TINNED BARE COPPER
IGR - #2 AWG ANNEALED STRANDED (7 STRAND) THW GREEN COLORED INSULATION
INTER-BUS EXTENSION (FROM IGR TO EGR) - SEE DETAILS ON DRAWING E-5.
EXTERNAL BOND CONNECTIONS TO EGR - #2 ANNEALED SOLID TINNED BARE COPPER
INTERIOR BOND CONNECTIONS TO IGR - #6 ANNEALED STRANDED (7 STRAND) THW GREEN COLORED INSULATION
ANTENNA BOND CONNECTION TO EGR - #2 SOLID COPPER

MINIMUM BENDING RADIUS

IGR #2 : 1'-0" NOMINAL AND 8" MINIMUM
EGR #2 : 2'-0" NOMINAL AND 8" MINIMUM
CELLULAR GROUNDING CONDUCTOR SHALL BE AS STRAIGHT AS POSSIBLE WITH MINIMUM 6" BENDING RADIUS.

FASTENER FOR CELLULAR GROUNDING CONDUCTOR

USE NON-METALLIC FASTENER AND STANDOFF 'CLIC' (AVAIL. FROM NEFCO 203-289-0285) TO SURFACE SUPPORT CONDUCTOR 3" AWAY FROM SURFACES.

SPACING OF FASTENERS: 2'-0" O.C. OUTSIDE BUILDING
3'-0" O.C. INSIDE BUILDING

CONNECTIONS ABOVE GRADE (MECHANICAL)

COMPRESSION LUG CONNECTOR - 15 TON COMPRESSION, 2 HOLE, LONG BARREL, ELECTRO TINNED PLATED, HIGH CONDUCTIVITY, COPPER 600V RATED. USE 1/4" Ø BOLT, 3/4" SPACING LUGS TO BOND OBJECTS FROM THE IGR. (CONNECTOR SHALL BE BURNDY HYLUG SERIES OR EQUAL.)

EXOTHERMIC WELD LUG CONNECTOR - 2 HOLE, OFFSET, ELECTRO TINNED PLATED, HIGH CONDUCTIVITY, COPPER 600V. USE 1/2" Ø BOLT, 1-3/4" SPACING LUGS. CONNECTOR SHALL BE CADWELD CONNECTION STYLE (CABLE TO SURFACE) TYPE LA, LUG SIZE 1/8 x 1. EXOTHERMIC WELD TO LUG AS REQUIRED.

C-TAP COMPRESSION CONNECTOR - HIGH CONDUCTIVITY COPPER FOR MAIN TO BRANCH LINE TAPPING. (CONNECTOR SHALL BE BURNDY HYTAP SERIES OR EQUAL.)

USE MATCHING MANUFACTURER TOOL AND DIE FOR COMPRESSION CONNECTION.

APPLY ANTI-OXIDANT CONDUCTIVITY ENHANCER COMPOUND ON SURFACES THAT ARE COMPRESSED.

SURFACES INTENDED TO BE CONNECTED WITH MECHANICAL CONNECTORS SHALL BE BARE METAL TO BARE METAL. PRIME AND PAINT OVER BONDED AREA TO PREVENT CORROSION.

MDP PANELBOARD

PANEL NAME/LOCATION: MDP VERIZON WIRELESS EQUIPMENT ROOM						MOUNTING: SURFACE					
MAIN: 200A MCCB						MANUFACTURER: CUTLER-HAMMER					
VOLTAGE/PHASE: 208Y/120V,3ø,4 WIRE						PANEL TYPE: PRL-3ø/ BOLT-ON					
PANEL RATING: 225A						AIC RATING: 22K MIN.					
CKT NO.	BRKR AMPS	P	LOAD DESCRIPTION	KVA	BRANCH CIRCUIT	BRANCH CIRCUIT	KVA	LOAD DESCRIPTION	P	BRKR AMPS	CKT NO.
1	60	3	SURGE ARRESTER	0	4#4,1#10G,1 1/4"C	2#8,1#10G,1"C	3.2	AC-1	2	45	2
3	-	-	-	-	-	-	3.2	-	-	-	4
5	-	-	-	-	-	2#12,1#12G,3/4"C	1.5	ELEC. HEATER	1	20	6
7	20	1	INTERIOR LIGHTS	0.7	2#12,1#12G,3/4"C	2#8,1#10G,1"C	3.2	AC-2	2	45	8
9	20	1	BATTERY CHARGER	1.0	2#12,1#12G,3/4"C	-	3.2	-	-	-	10
11	20	1	SMOKE DETECTOR	0.1	2#12,1#12G,3/4"C	2#12,1#12G,3/4"C	0.8	EXHAUST FAN	1	20	12
13	30	2	RECTIFIER #1	-	2#10,1#10G,1"C	2#10,1#10G,1"C	-	RECTIFIER #7	2	30	14
15	-	-	-	-	-	-	-	-	-	-	16
17	30	2	RECTIFIER #2	-	2#10,1#10G,1"C	2#10,1#10G,1"C	-	RECTIFIER #8	2	30	18
19	-	-	-	-	-	-	-	-	-	-	20
21	30	2	RECTIFIER #3	-	2#10,1#10G,1"C	2#10,1#10G,1"C	-	RECTIFIER #9	2	30	22
23	-	-	-	-	-	-	-	-	-	-	24
25	30	2	RECTIFIER #4	-	2#10,1#10G,1"C	2#10,1#10G,1"C	-	RECTIFIER #10	2	30	26
27	-	-	-	-	-	-	-	-	-	-	28
29	30	2	RECTIFIER #5	-	2#10,1#10G,1"C	2#10,1#10G,1"C	-	RECTIFIER #11	2	30	30
31	-	-	-	-	-	-	-	-	-	-	32
33	30	2	RECTIFIER #6	-	2#10,1#10G,1"C	2#10,1#10G,1"C	-	RECTIFIER #12	2	30	34
35	-	-	-	-	-	-	-	-	-	-	36
37	20	1	RECEPTACLE	0.4	2#12,1#12G,3/4"C	2#12,1#12G,3/4"C	0.6	RECEPTACLE	1	20	38
39	60	2	CU-1	4.0	2#6-1#8G,1"C	2#6-1#8G,1"C	4.0	CU-2	2	60	40
41	-	-	-	4.0	-	-	4.0	-	-	-	42

NOTES

- BRANCH CB AND CONDUCTOR SIZE AND QUANTITY BASED ON SPECIFIED EQUIPMENT. CONFIRM ELECTRICAL REQUIREMENTS PRIOR TO INSTALLATION.
- ALL BRANCH CIRCUITS SHALL BE ROUTED IN 4" X 4" WIREWAY TO FULLEST POSSIBLE EXTENT. CONNECTIONS FROM WIREWAY TO EQUIPMENT AND DEVICES SHALL BE IN CONDUIT INDICATED IN PANELBOARD SCHEDULE.

STANDARD ACCESSORIES

- COPPER BUSSING ONLY
- COPPER EQUIPMENT GROUND KIT
- INSULATED COPPER SOLID NEUTRAL BAR
- BOLT-ON TYPE BRANCH CIRCUIT BREAKERS
- METAL DIRECTORY FRAME WITH GLASS/PLASTIC WINDOW
- LAMINATED ENGRAVED BAKELITE NAMEPLATE
- FRONT DOOR (DOOR-IN-DOOR CONSTRUCTION)

EQUIPMENT LEGEND

DESIGNATION	DESCRIPTION
SA	SURGE ARRESTER - JOSLYN #1455-85-PM FOR THREE PHASE, FOUR WIRE 208Y/120VAC IN A NEMA 1 ENCLOSURE.
PL	PHASE LIGHTS - "LED" PILOT LIGHT, AMBER 120V, LONG LIFE MOUNTED IN MCKINSTRY #53-3 PILOT LIGHT ENCLOSURE, PROVIDE ONE LAMP FOR EACH PHASE TO NEUTRAL.
VM	VOLTAGE MONITOR - TIME MARK CORPORATION, MODEL #AC260B-80-130 (6) SIX SINGLE PHASE, 120VOLTS, FURNISH MATCHING SOCKET #51X00120-01, MOUNT IN 12" X 12" X 4"D NEMA 1 ENCLOSURE (MCKINSTRY #30-1212LP/42-1212) WITH "T" HANDLE LATCH KIT. FURNISH AND INSTALL GENERAL DUTY FUSIBLE DISCONNECT SWITCH IN NEMA 1 ENCLOSURE WITH (1) ONE AMP FUSES PER PHASE AHEAD OF EACH VOLTAGE MONITOR.
ATS	AUTOMATIC TRANSFER SWITCH - ASCO # 94032604711C/14B FOR THREE PHASE, FOUR WIRE 208Y/120VAC IN NEMA 1 ENCLOSURE.

LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER CATALOG/MODEL No.	DESCRIPTION	LAMP	MOUNTING	NOTES
B	HUBBELL WII43WACT1	SURFACE MOUNTED LIGHT FIXTURE WITH ACRYLIC PRISMATIC LENS, T-8 LAMPS AND ELECTRONIC BALLAST	(3)-32W	CEILING	1
E	SURE-LITES #CC-3-WHSD	EMERGENCY LIGHT UNIT WITH 90 MINUTE NICKEL CADMIUM BATTERY & SELF-DIAGNOSTIC TESTING FEATURE	(2) 5.4W PAR36	CEILING	1

NOTES:

- PROVIDE ALL THE NECESSARY ACCESSORIES AS REQUIRED TO MOUNT LIGHTING FIXTURES TO CEILING STRUCTURE AS REQUIRED.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	FLUORESCENT LIGHTING FIXTURE
	EMERGENCY FIXTURE
	DISCONNECT SWITCH
	HOMERUN, PANELBOARD AND CIRCUIT # AS INDICATED
	BRANCH CIRCUIT CONDUIT AND CONDUCTORS
	SWITCHED BRANCH CIRCUIT CONDUIT AND CONDUCTORS
	ELECTRICAL CONDUIT AND CONDUCTORS
	TELECOMMUNICATIONS CONDUIT AND CABLES
	GROUND SYSTEM CONDUIT AND CONDUCTORS
	60 MIN. TIMER SWITCH. (MOUNTED 54" AFF)
	MAIN DISTRIBUTION PANEL
	ALARM JUNCTION BOX
	DUPLEX RECEPTACLE
	QUADRUPLUX RECEPTACLE
	SPECIAL PURPOSE CONNECTION W/FUSED DISCONNECT
	HIGH TEMPERATURE SENSOR
	LOW TEMPERATURE SENSOR
	THERMOSTAT (PROVIDED BY DIVISION 15, INSTALLED BY DIVISION 16)
	HIGH HUMIDISTAT (PROVIDED BY DIVISION 15, INSTALLED BY DIVISION 16)
	SMOKE DETECTOR
	DOOR ALARM CONTACT
	AUTOMATIC TRANSFER SWITCH
	TELEPHONE OUTLET, RJ-11/45 MODULAR JACK (MOUNTED 54" AFF)
	EXOTHERMIC WELD CONNECTION
	MECHANICAL CONNECTION USING COMPRESSION LUG CONNECTOR
	MECHANICAL CONNECTION USING EXOTHERMIC WELDED LUG CONNECTOR
	MECHANICAL CONNECTION USING (3) C-TAP COMPRESSION MAIN - BRANCH
	2" COPPER WIRE WITH COMPRESSION LUGS AT EACH END. CUT TO LENGTH IN FIELD.(BRAID)
	GROUND BAR
	PHOTO CELL
	SAFETY TOGGLE DISCONNECT

ELECTRICAL ABBREVIATIONS

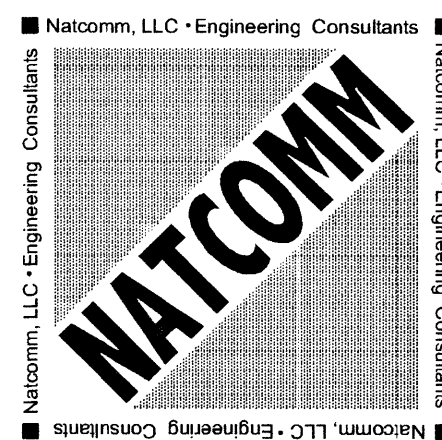
ABBREVIATION	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
AIC	AMPERE INTERRUPTING CAPACITY
AWG	AMERICAN WIRE GAGE
C	CONDUIT
EGR	EXTERIOR GROUND RING
G - GRD	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
IGR	INTERIOR GROUND RING MOUNTED 9'-0" ABOVE FINISHED FLOOR
KWH	KILO-WATT-HOUR
MCCB	MOLDED CASE CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
NC	NORMALLY CLOSED
OC	ON CENTER
SA	SURGE ARRESTER
VM	VOLTAGE MONITOR
WP	WEATHERPROOF

REVISIONS

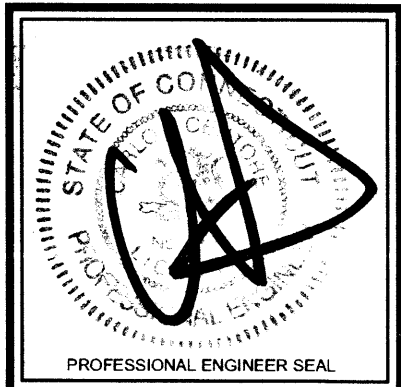
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Natcomm, L.L.C.

63-2 North Branford Road
Branford, Connecticut 06405Tel: (203) 488-0580
Fax: (203) 488-0587Consulting Engineers - Project Management
Civil - Structural - Mechanical - Electrical

NEW FAIRFIELD

TITICUS MNT. RD.
NEW FAIRFIELD, CONNECTICUT

PROJECT NO: 05073

DRAWN BY: DMD

CHECKED BY: FRC

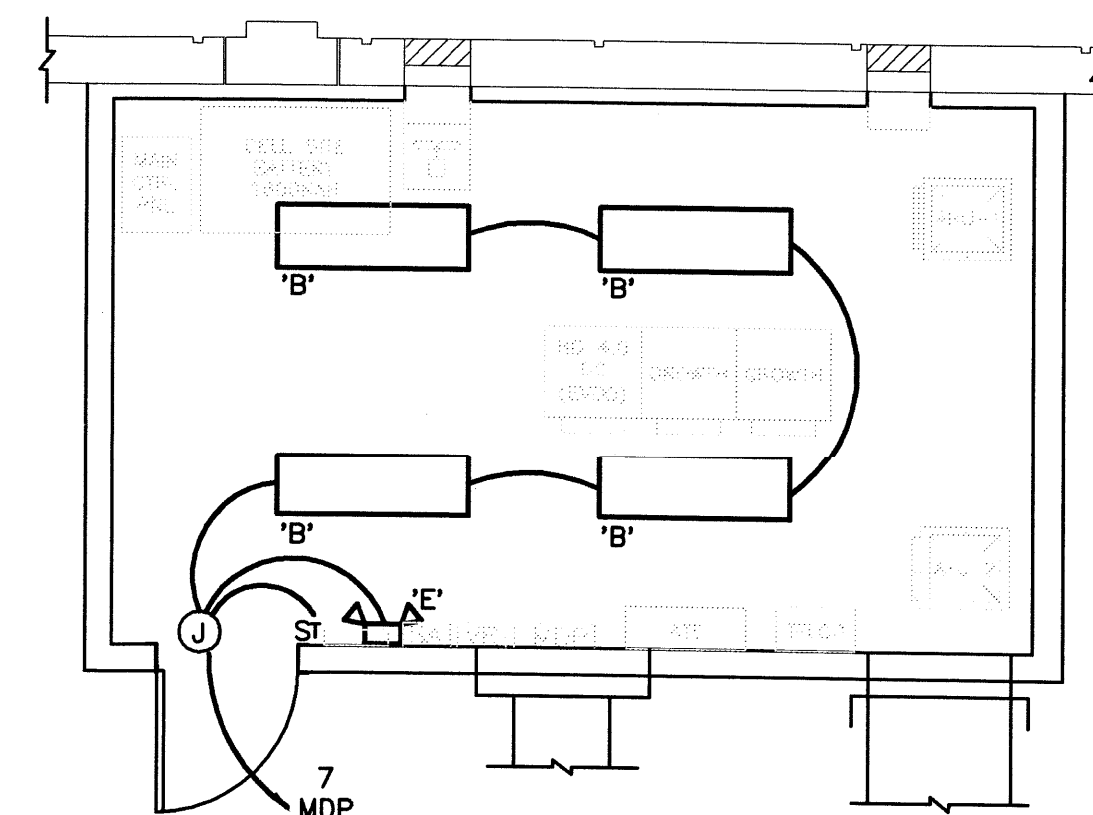
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DATE: 08/19/05

ELECTRICAL
NOTES &
ABBREVIATIONS

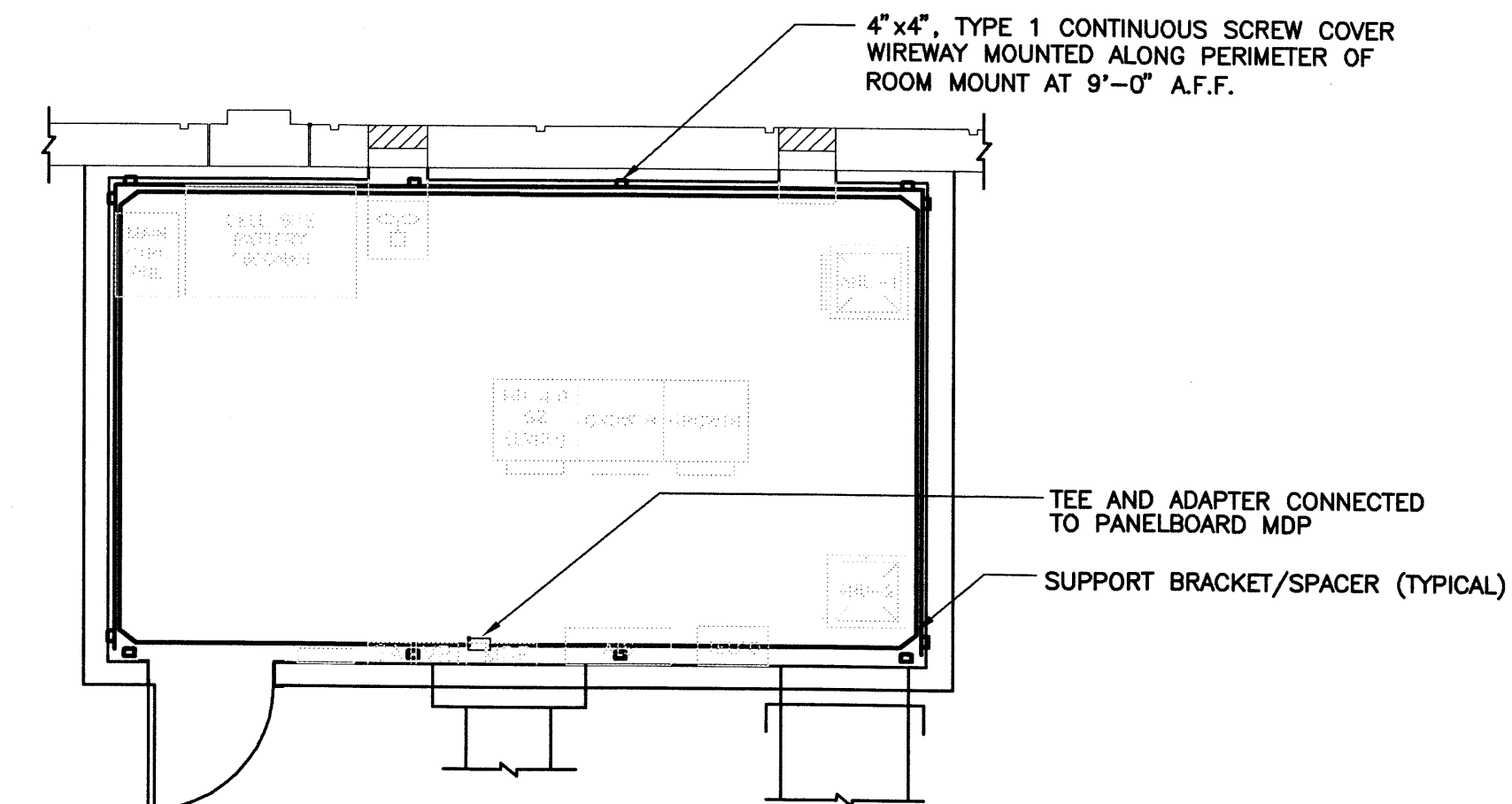
E-1

DWG. 8 OF 14

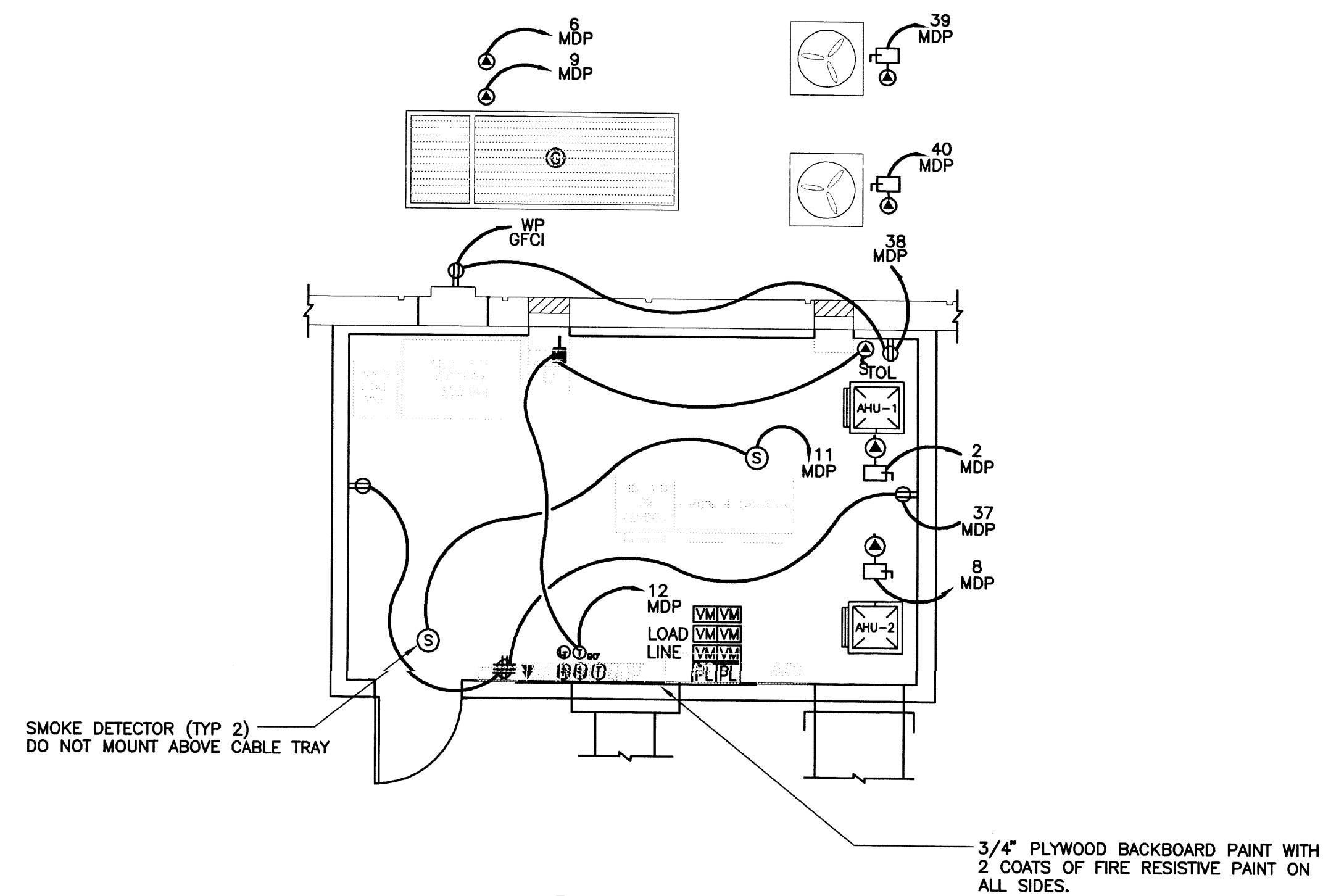


1
E-2

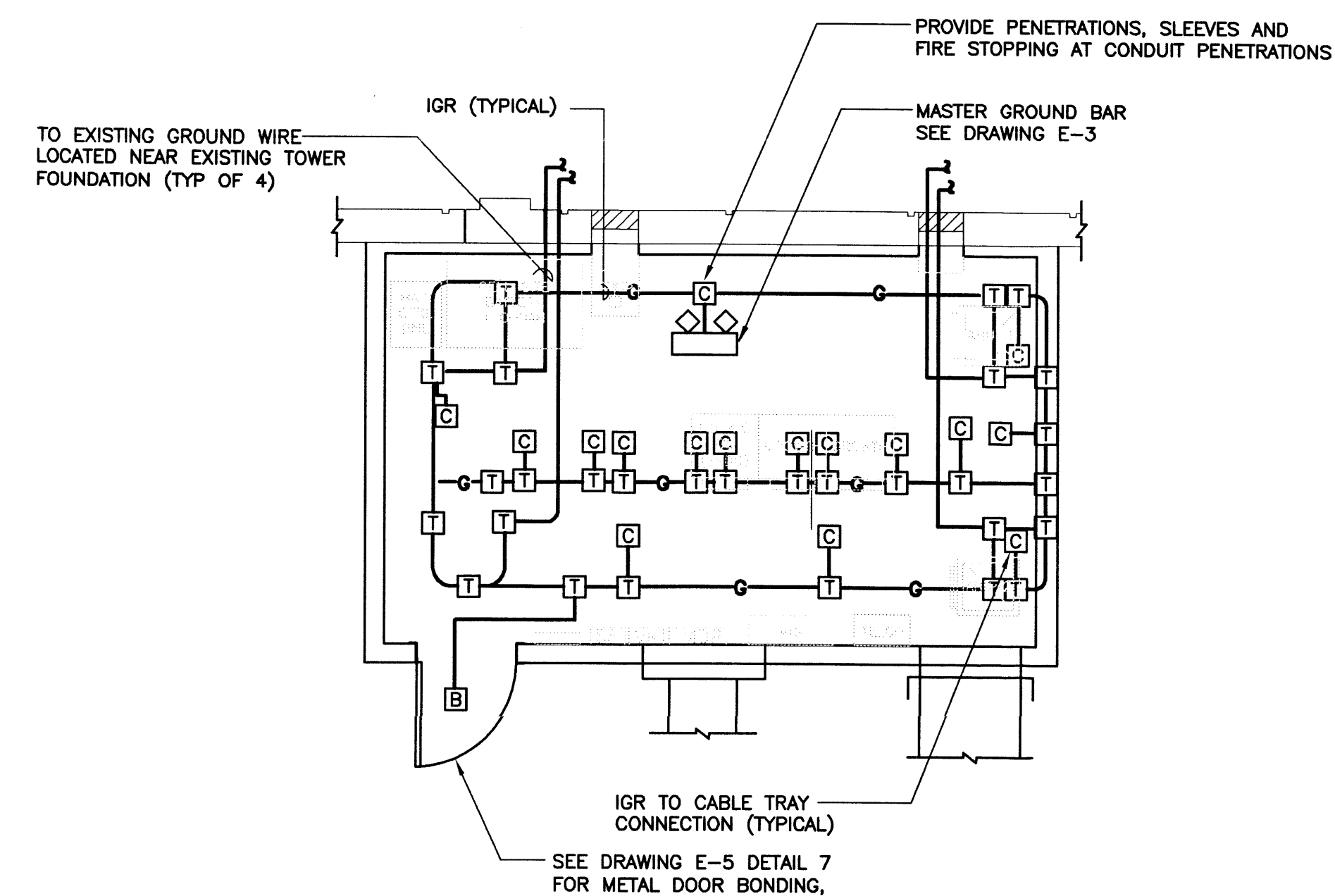
LIGHTING PLAN
SCALE: 1/4" = 1'-0"



2 WIREWAY LAYOUT PLAN
E-2 SCALE: 1/4" = 1'-0"



3 POWER PLAN
E-2 SCALE: 1/4" = 1'-0"



4 **GROUNDING PLAN**
E-2 SCALE: 1/4" = 1'-0"

[illegible]

Cellco Partnership
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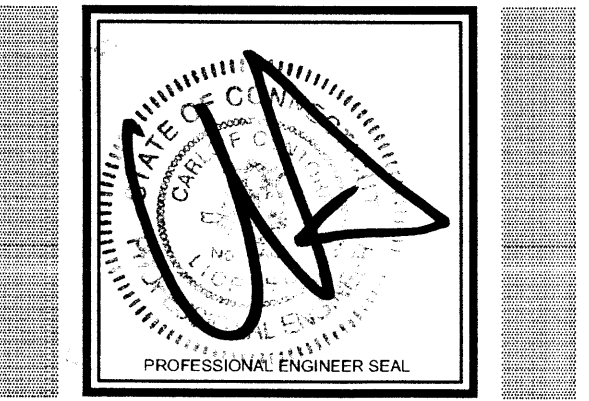
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Natcomm, L.L.C.

63-2 North Branford Road
Branford, Connecticut 06405

Tel. (203) 488-0580
Fax (203) 488-8567

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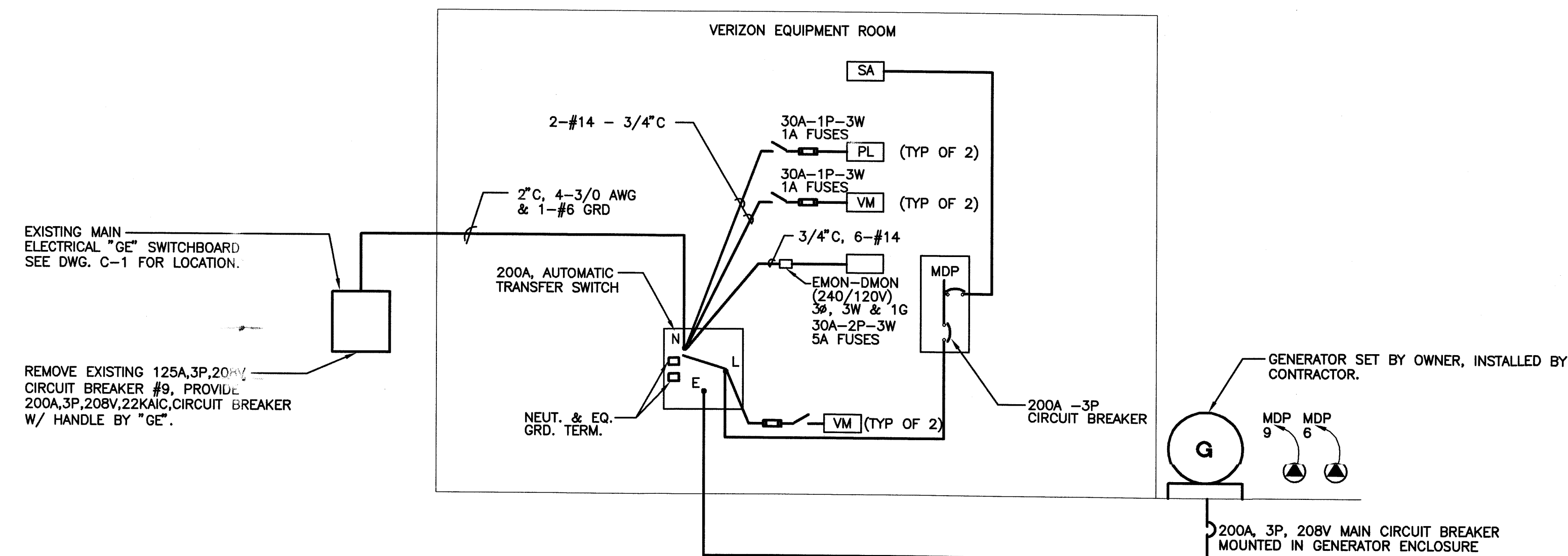
NEW FAIRFIELD

TITICUS MNT. RD.
NEW FAIRFIELD, CONNECTICUT

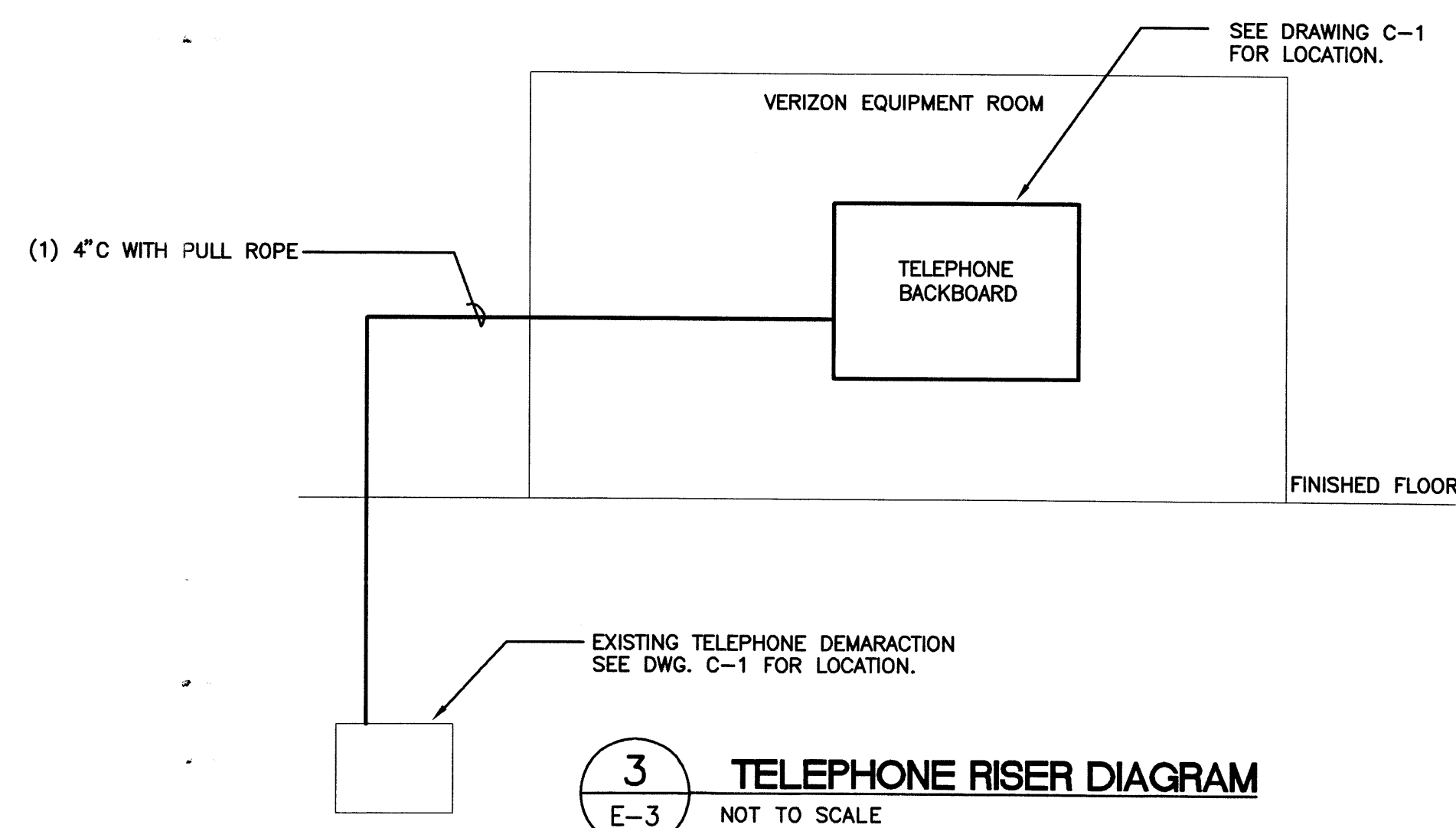
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DRAWN BY:	TMS
CHECKED BY:	FRC
SCALE:	1/4"=1'-0"
DATE:	08/19/05

ELECTRICAL
PLANS

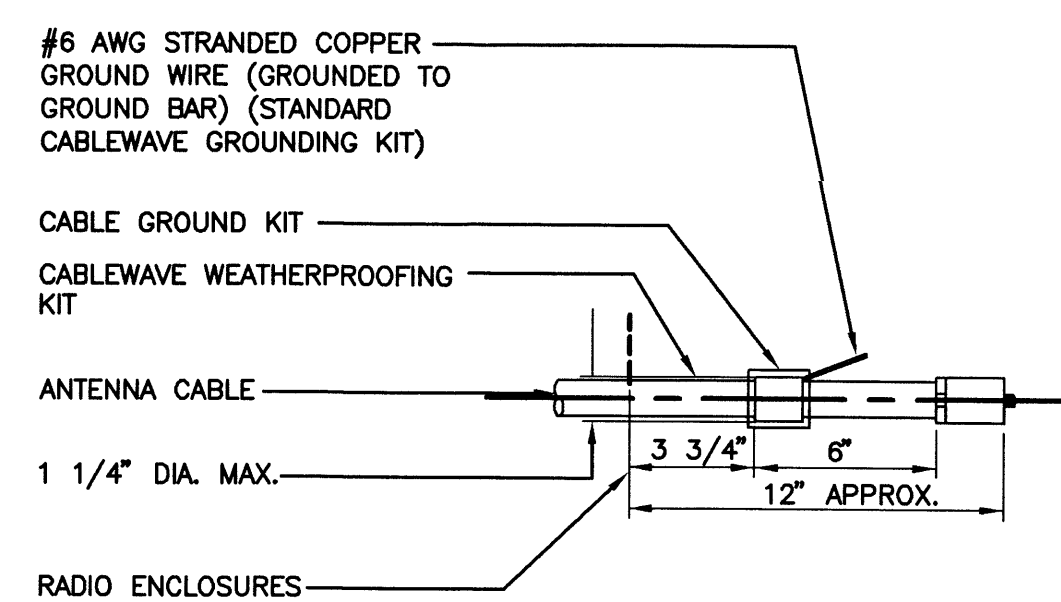
E-2
DWG. 9 OF 14



1 ONE-LINE RISER DIAGRAM
E-3 NOT TO SCALE

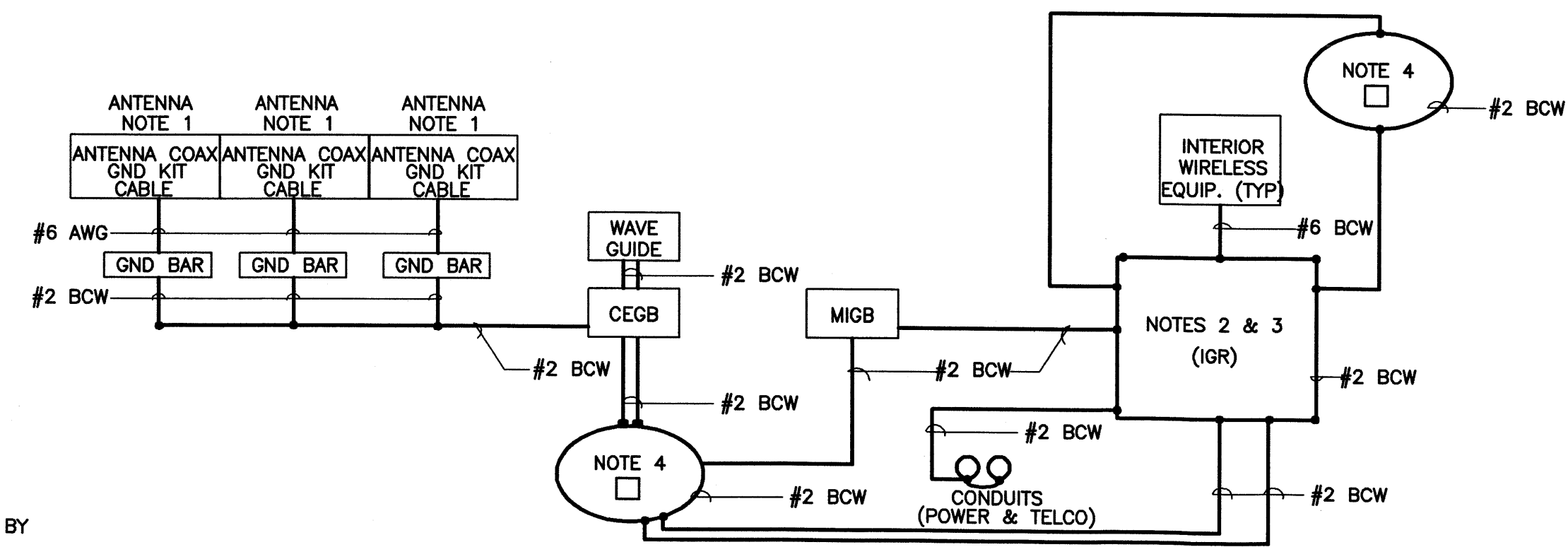


3 TELEPHONE RISER DIAGRAM
E-3 NOT TO SCALE



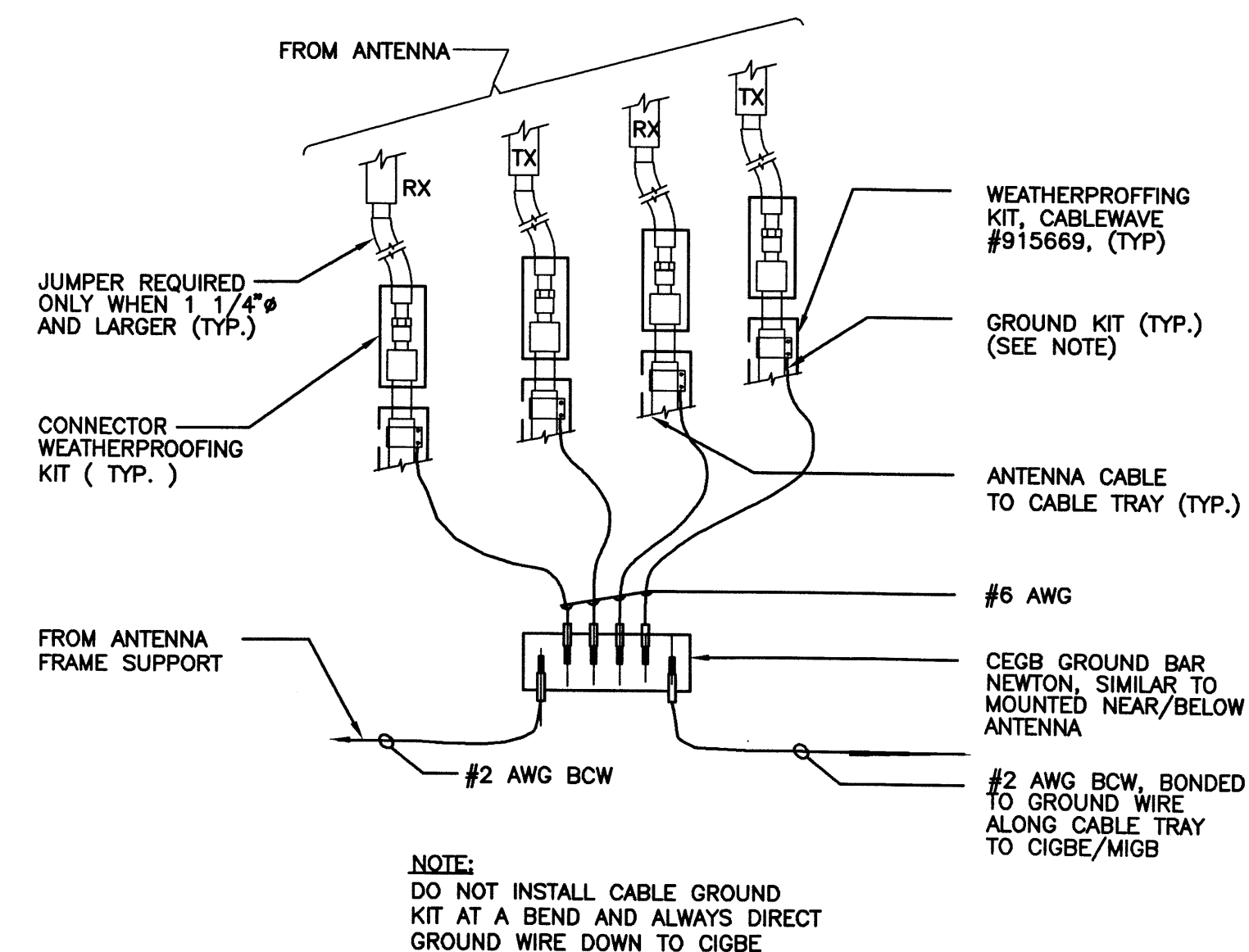
NOTE: DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

5 CABLE GROUND ANTENNA DETAIL
E-3 NOT TO SCALE

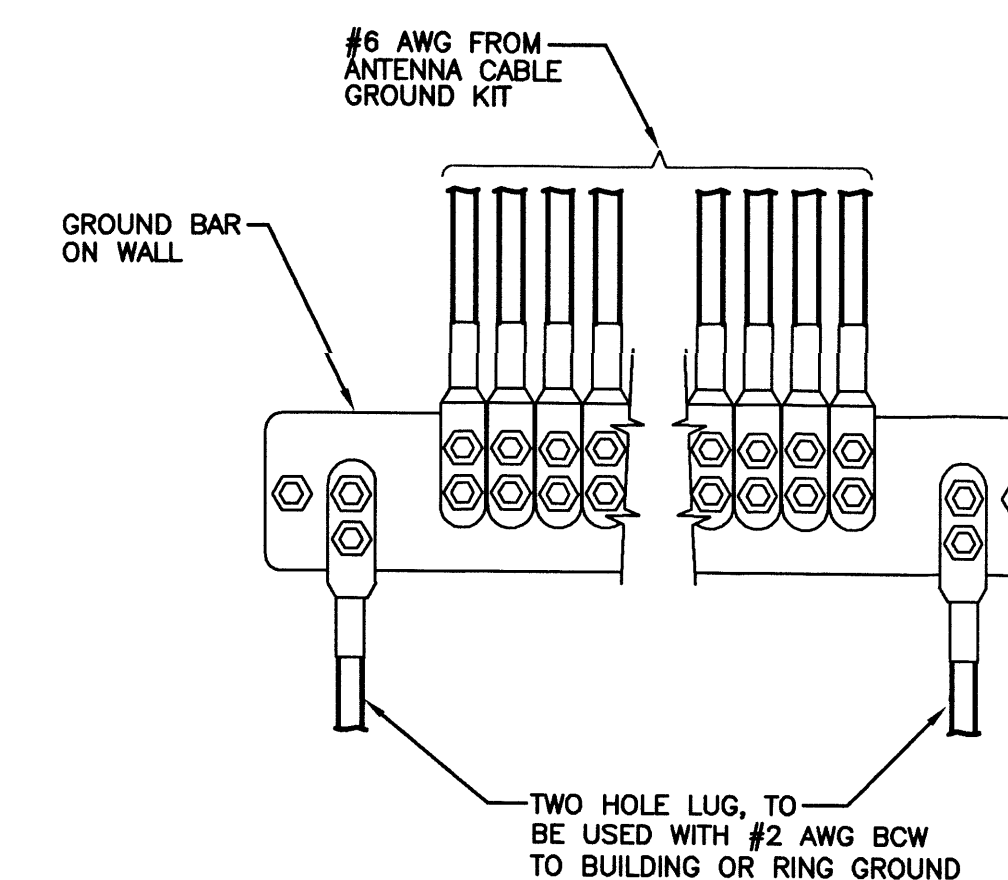


- NOTES:**
1. DOND ANTENNA GROUNDING KIT CABLE TO GROUND BAR
 2. INTERIOR RING GROUND FOR EQUIPMENT.
 3. FOR GROUNDING CONNECTION & DETAILS, SEE LAYOUT DRAWINGS.
 4. BUILDING STEEL.

2 SCHEMATIC DIAGRAM - GROUNDING SYSTEM
E-3 NOT TO SCALE

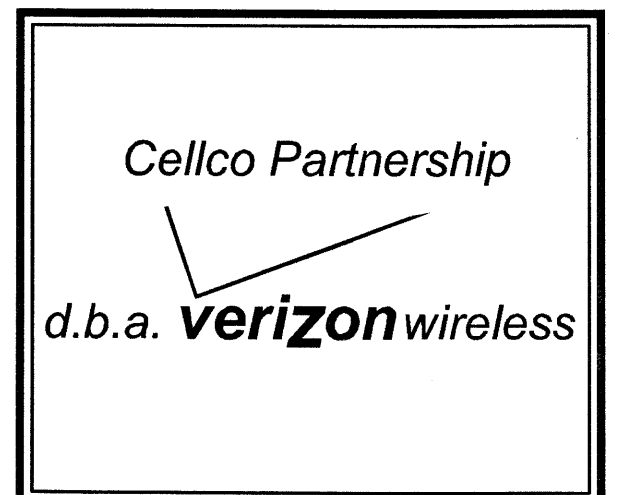


4 CONNECTION OF GROUND WIRES TO GROUNDING BAR
E-3 NOT TO SCALE

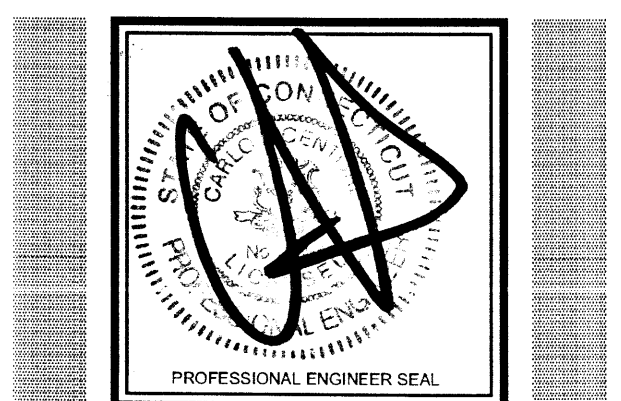
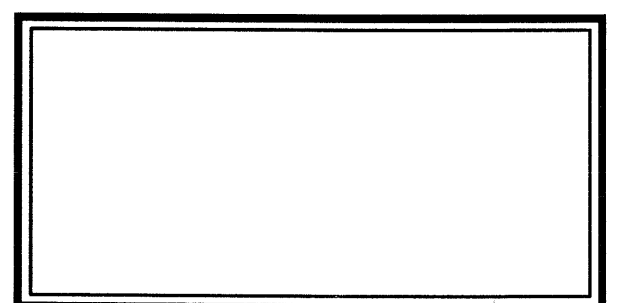


6 INSTALLATION OF GROUND WIRE TO GROUND BAR
E-3 NOT TO SCALE

REVISIONS		
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Natcomm, LLC - Engineering Consultants
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Branford, Connecticut 06405
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Fax (203) 488-8587
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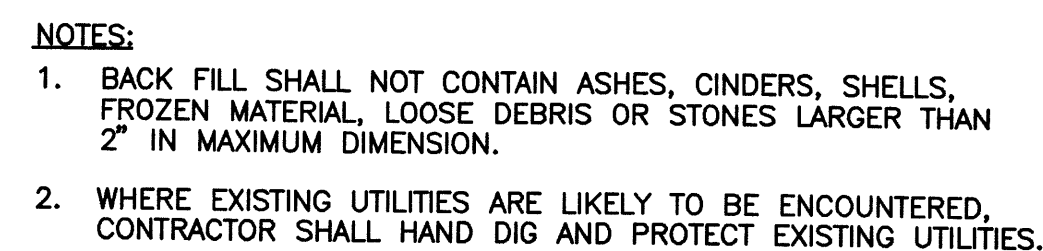


NEW FAIRFIELD
TITICUS MNT. RD.
NEW FAIRFIELD, CONNECTICUT

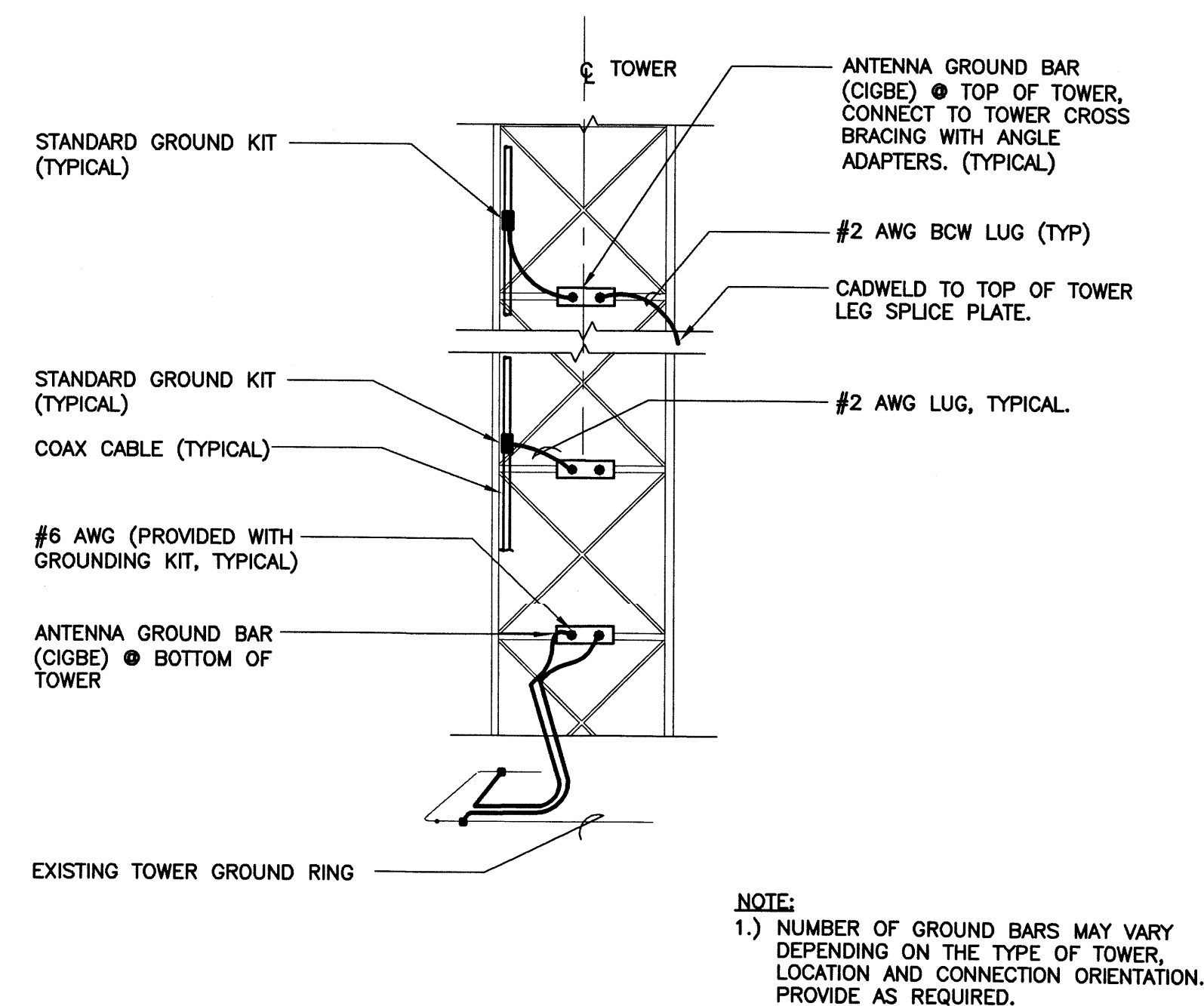
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DRAWN BY:	DMD
CHECKED BY:	FRC
SCALE:	AS NOTED
DATE:	08/19/05

**ELECTRICAL
DETAILS**

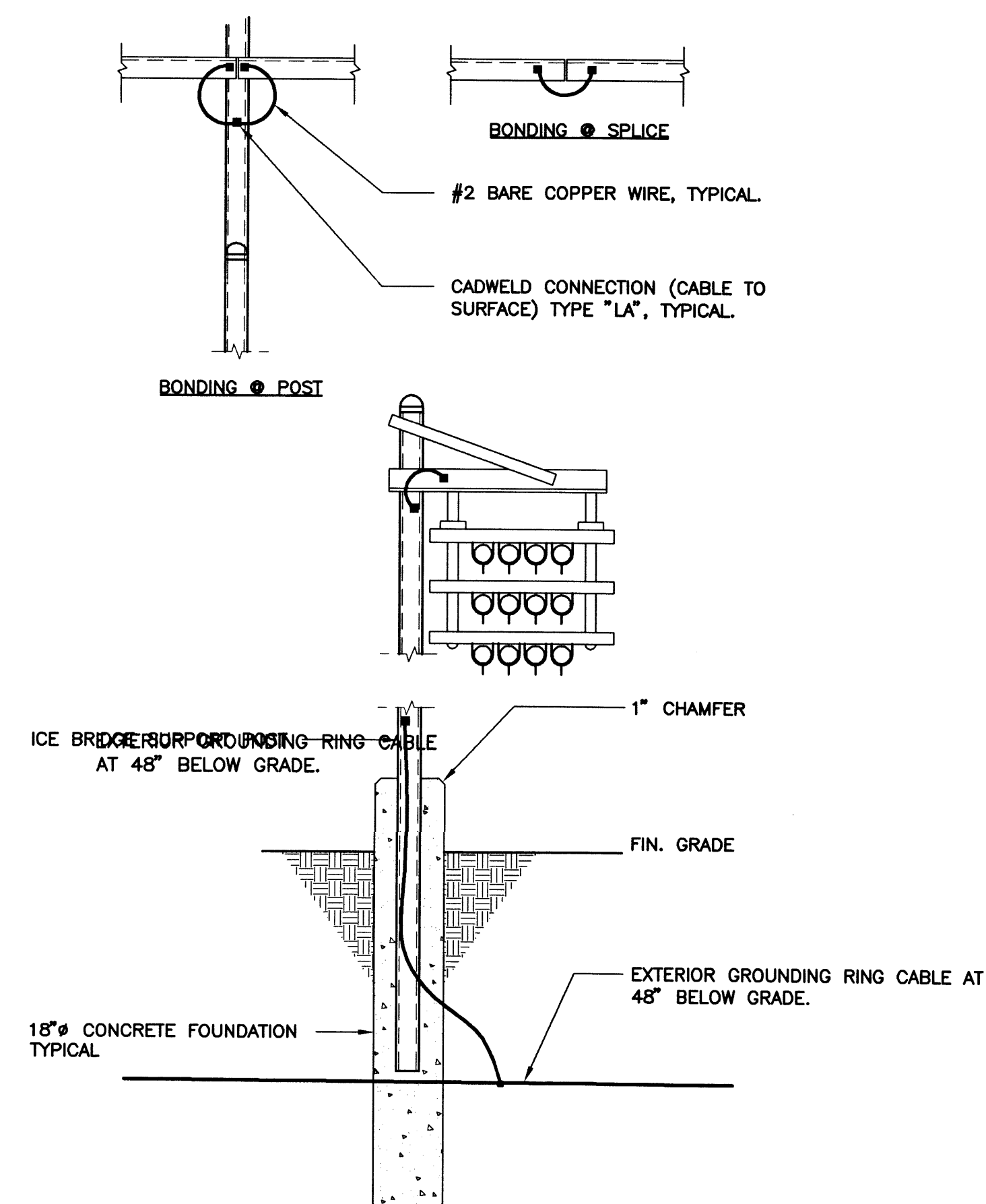
E-3
DWG. 10 OF 14



1 TYPICAL BURIAL GROUND CABLE DETAIL



2 ANTENNA CABLE GROUNDING - LATTICE TOWER
E-4 NOT TO SCALE



3 ICE BRIDGE BONDING DETAIL

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Natcomm, L.L.C.

63-2 North Branford Road
Branford, Connecticut 06405

Tel. (203) 488-0580
Fax (203) 488-5387

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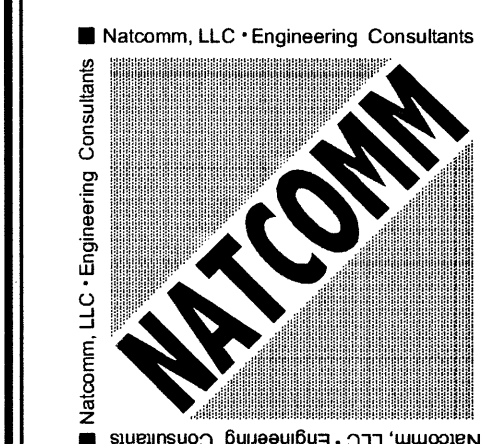
TITICUS MNT. RD.
NEW FAIRFIELD, CONNECTICUT

GROUNDING DETAILS

REVISIONS

NO.	DATE	DESCRIPTION
00	08/19/05	BUILDING PERMIT

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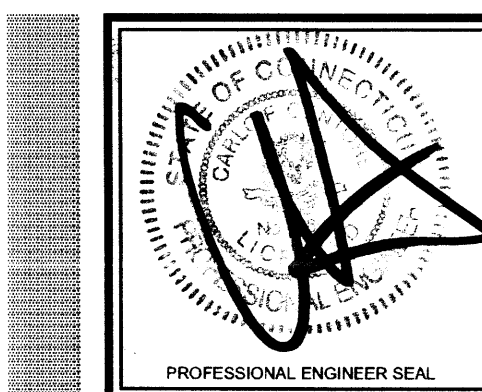


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63-2 North Branford Road
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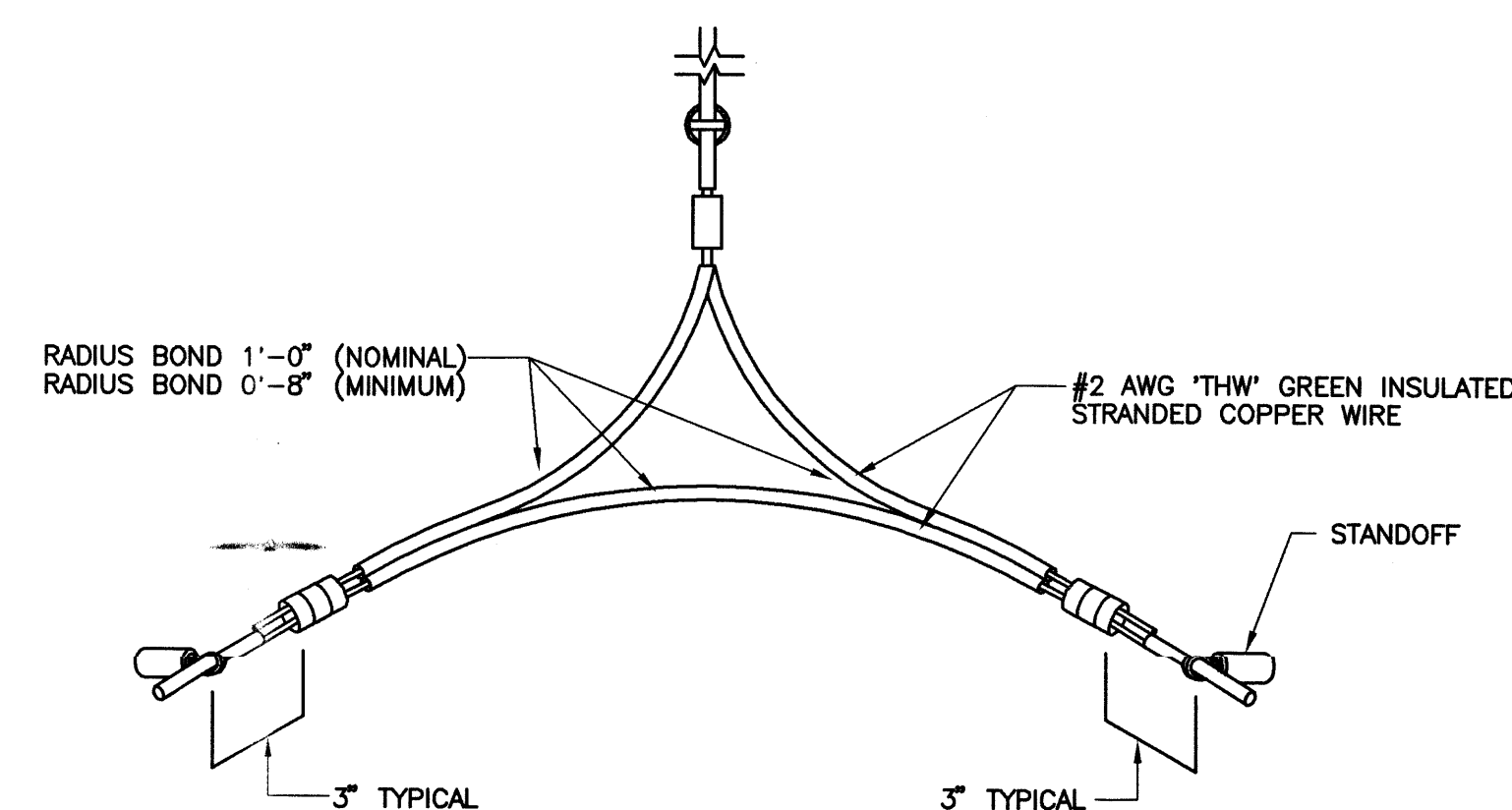
TITICUS MNT. RD.
NEW FAIRFIELD, CONNECTICUT

PROJECT NO:	05073
DRAWN BY:	DMD
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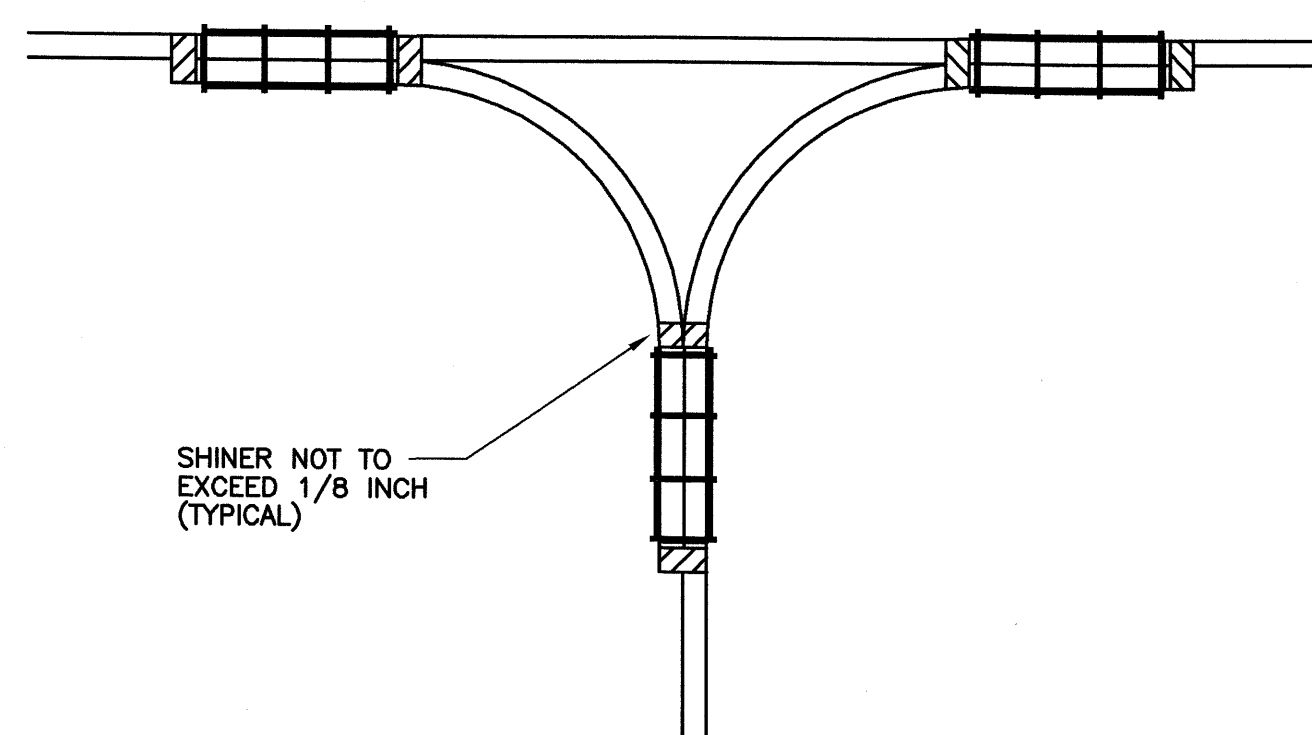
CELLULAR
DETAILS

E-5

DWG. 12 OF 14

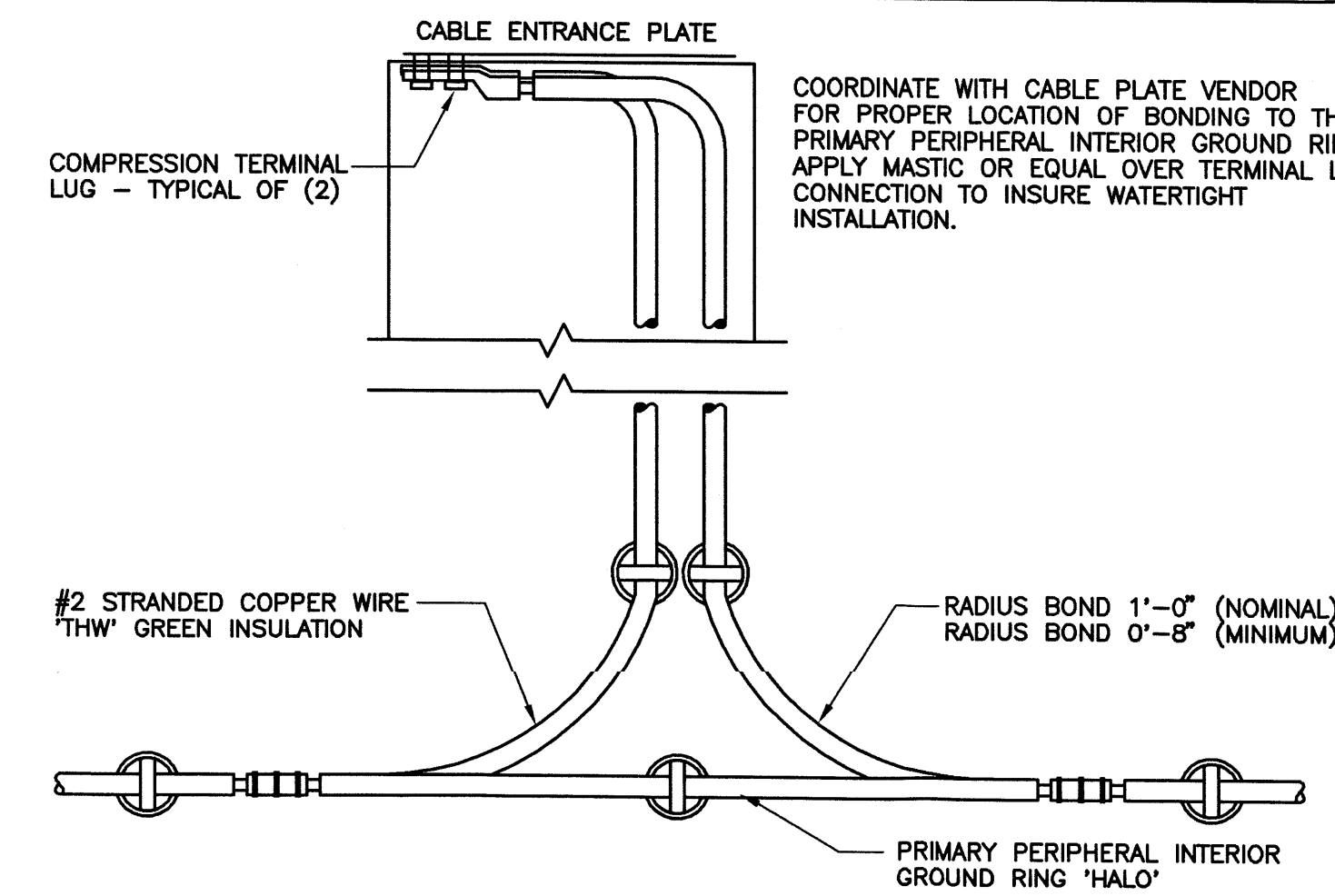


10
E-5
ISOMETRIC VIEW OF VERTICAL NONDIRECTIONAL SPLICING FOR CORNER INSTALLATION
NOT TO SCALE

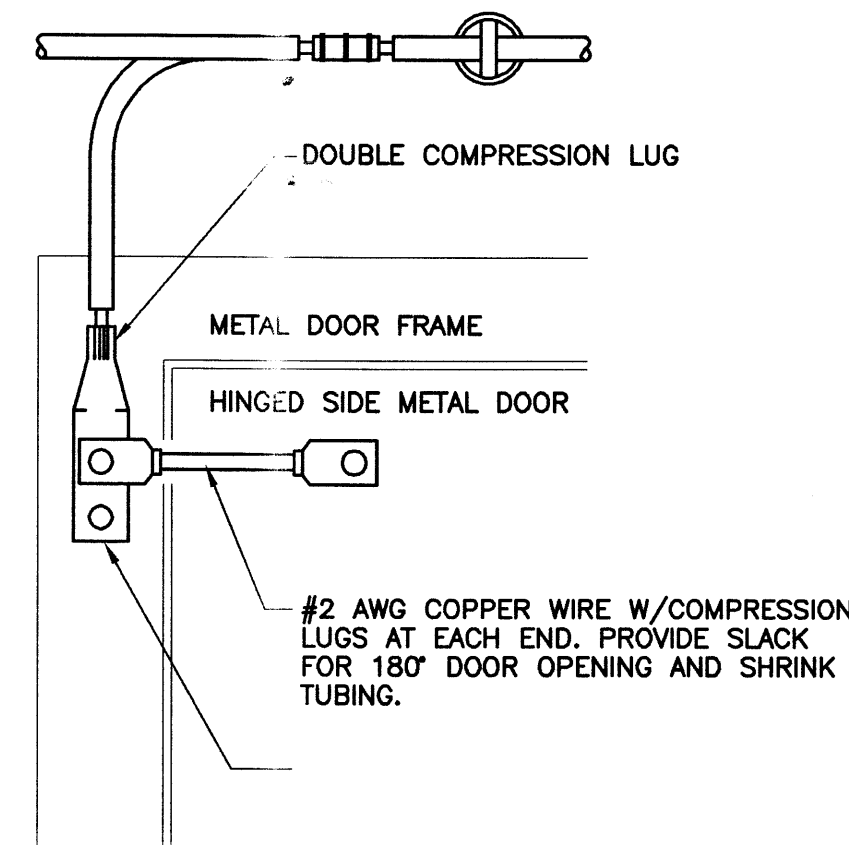


9
E-5
HORIZONTAL NONDIRECTIONAL SPLICING
NOT TO SCALE

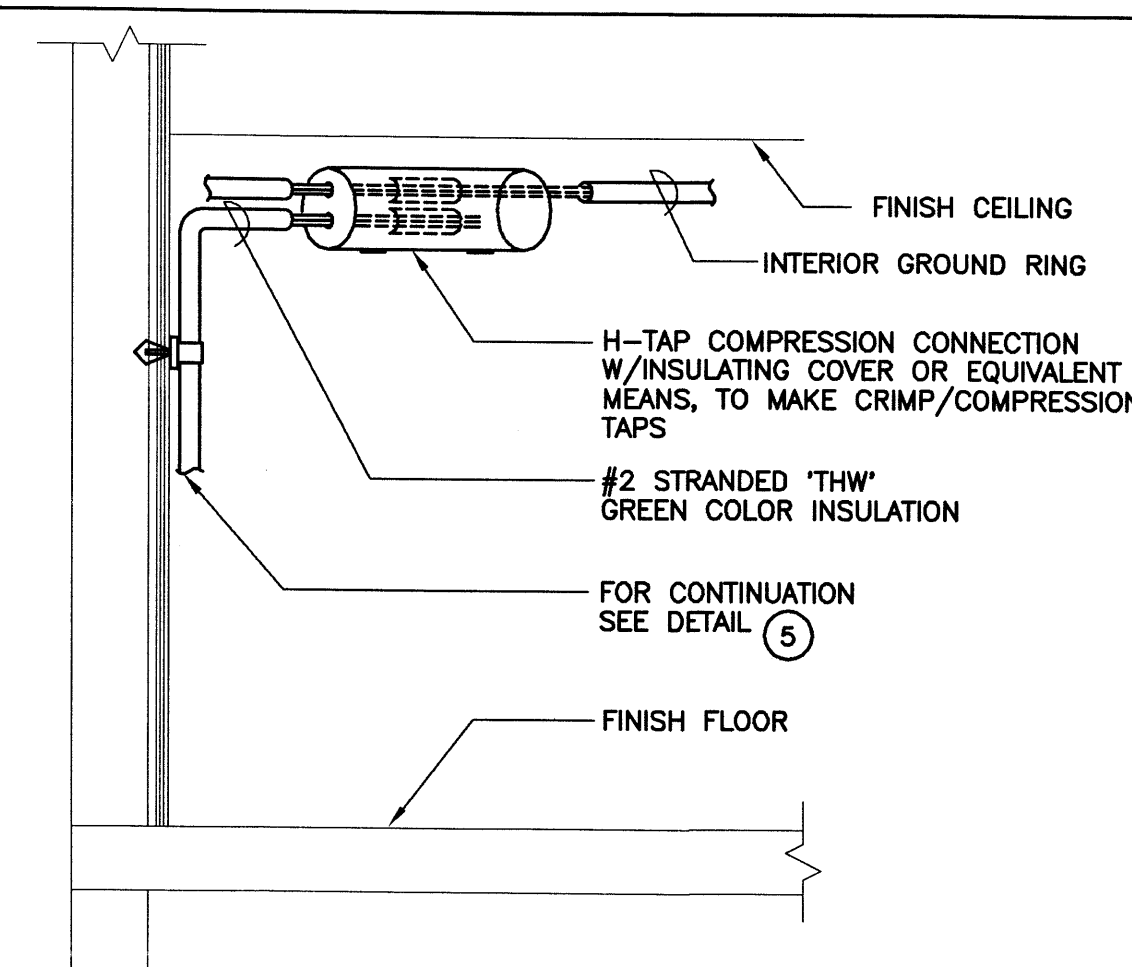
HORIZONTAL OMNI-DIRECTIONAL SPLICING FOR CONNECTING:
1. SUPPLEMENTARY BUS TO SUPPLEMENTAL BUS.
2. SUPPLEMENTARY BUS TO PRIMARY PERIPHERAL INTERIOR GROUND RING.



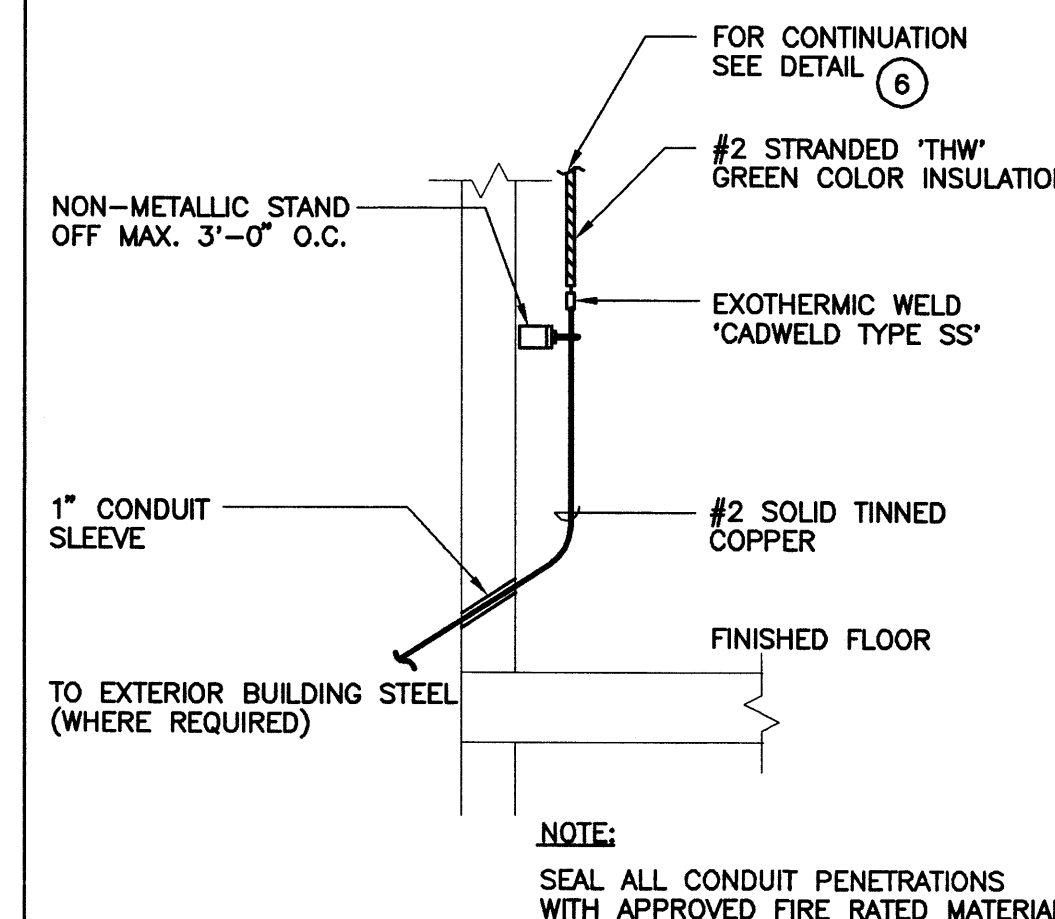
8
E-5
BONDING CABLE ENTRANCE PLATE TO PRIMARY PERIPHERAL INTERIOR GROUND RING
NOT TO SCALE



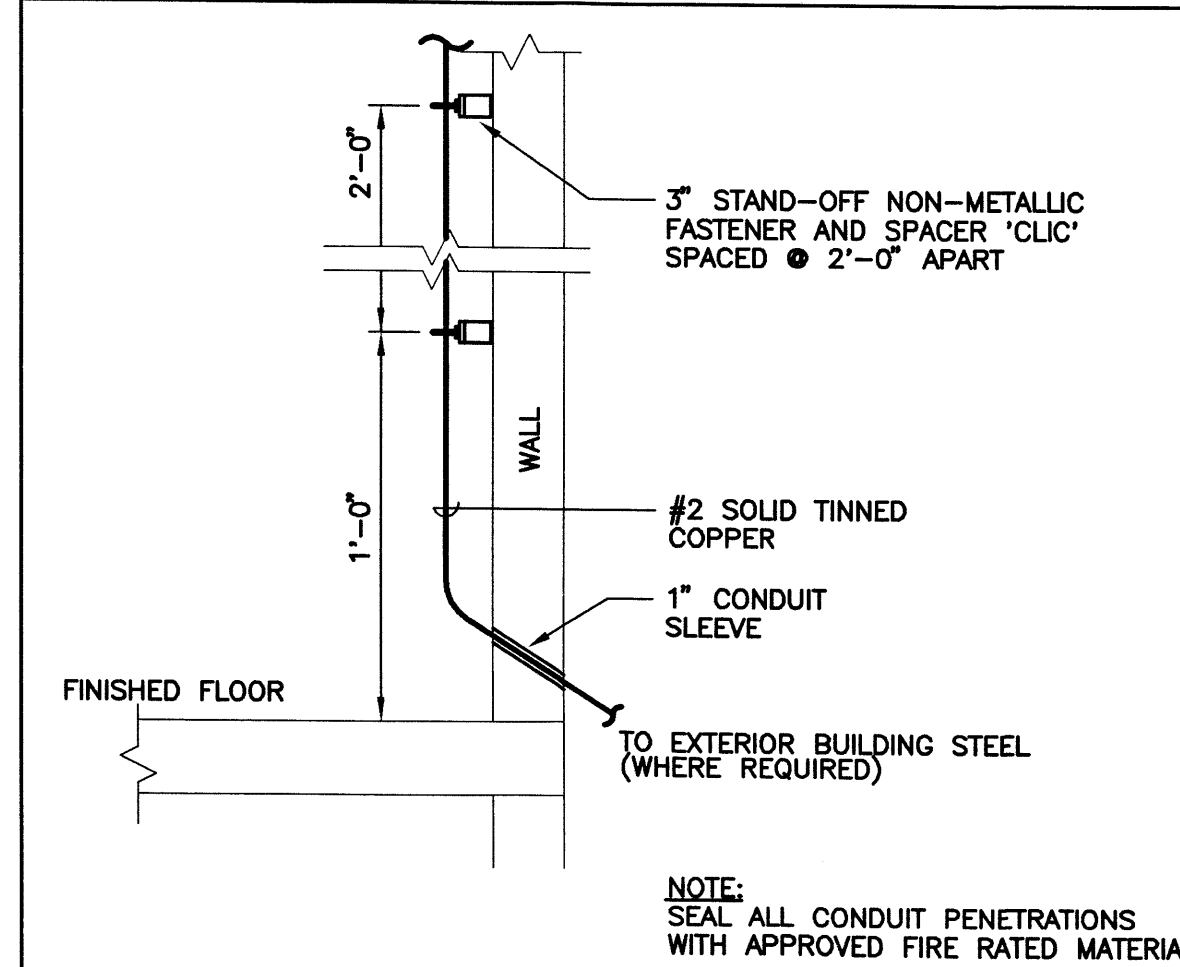
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E-5
BONDING METAL DOOR FRAME AND DOOR TO INTERIOR GROUNDING RING
NOT TO SCALE



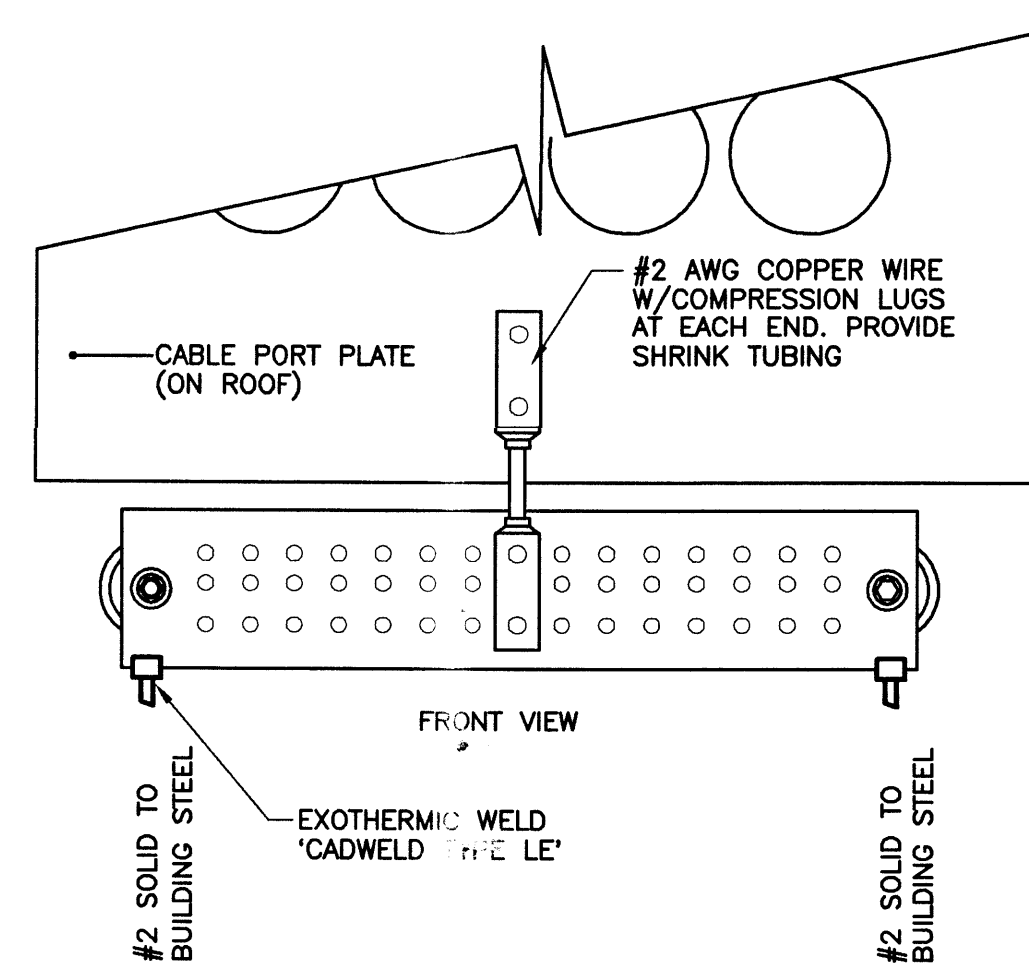
6
E-5
TYPICAL EXTERIOR/INTERIOR GROUNDING RING CONNECTION DETAIL
NOT TO SCALE



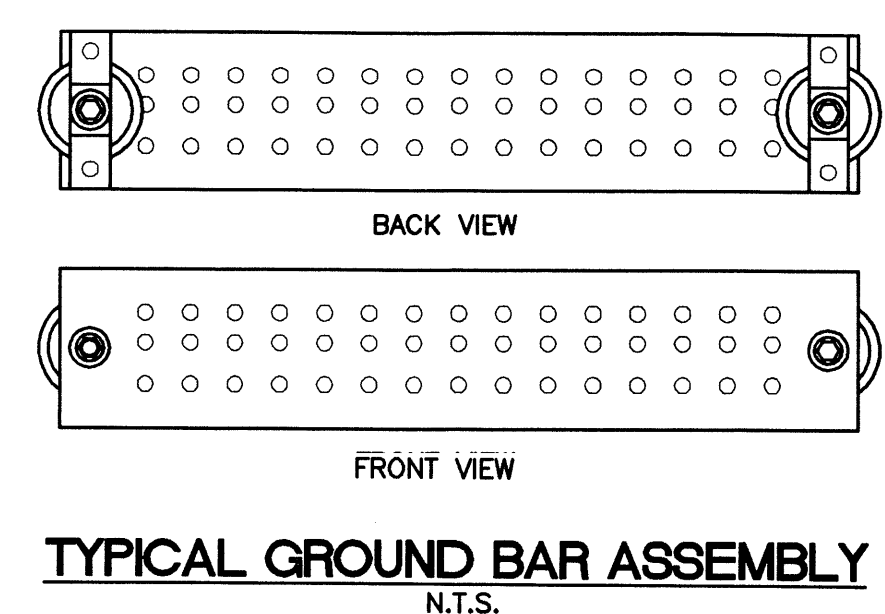
5
E-5
INTERIOR-BUS EXTENSION
NOT TO SCALE



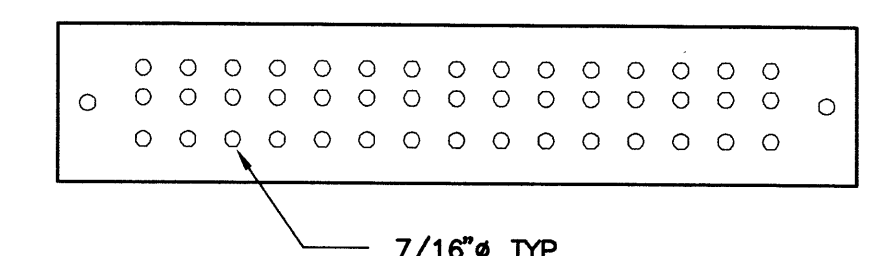
4
E-5
CELLULAR GROUNDING CONDUCTOR SECURED ON WALL
NOT TO SCALE



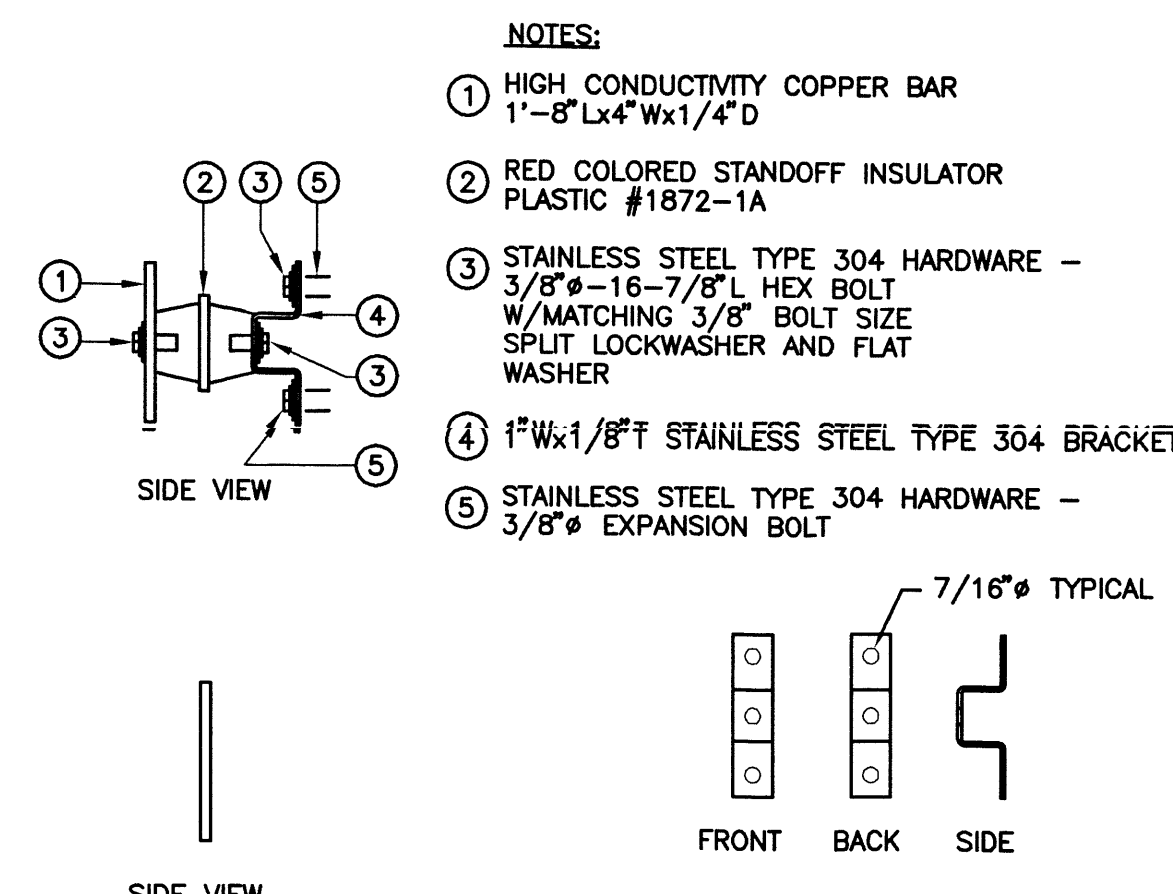
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E-5
WAVEPORT GROUND BAR LUG CONNECTION
NOT TO SCALE



TYPICAL GROUND BAR ASSEMBLY
N.T.S.

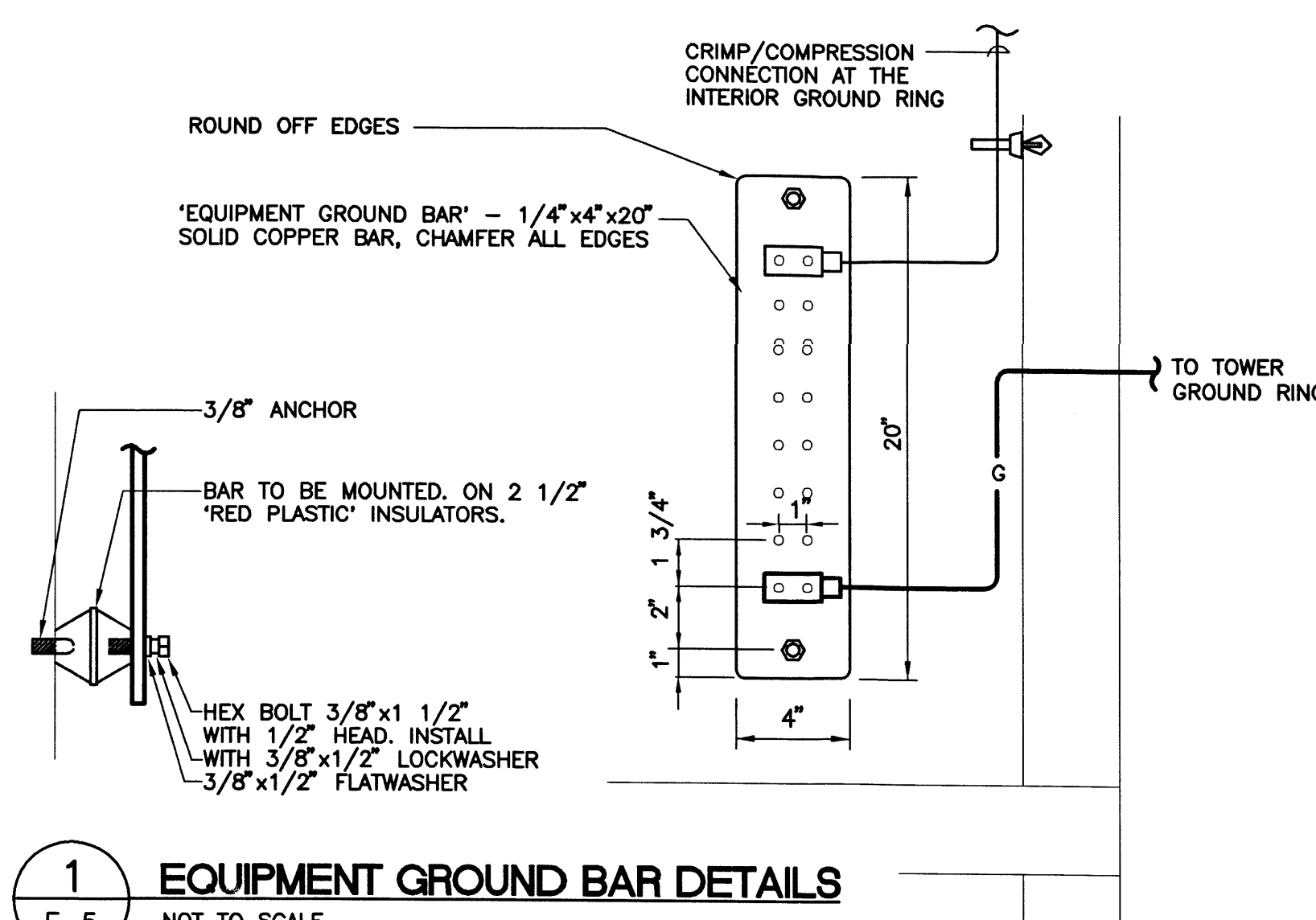


TYPICAL GROUND BAR - DIMENSIONS
N.T.S.

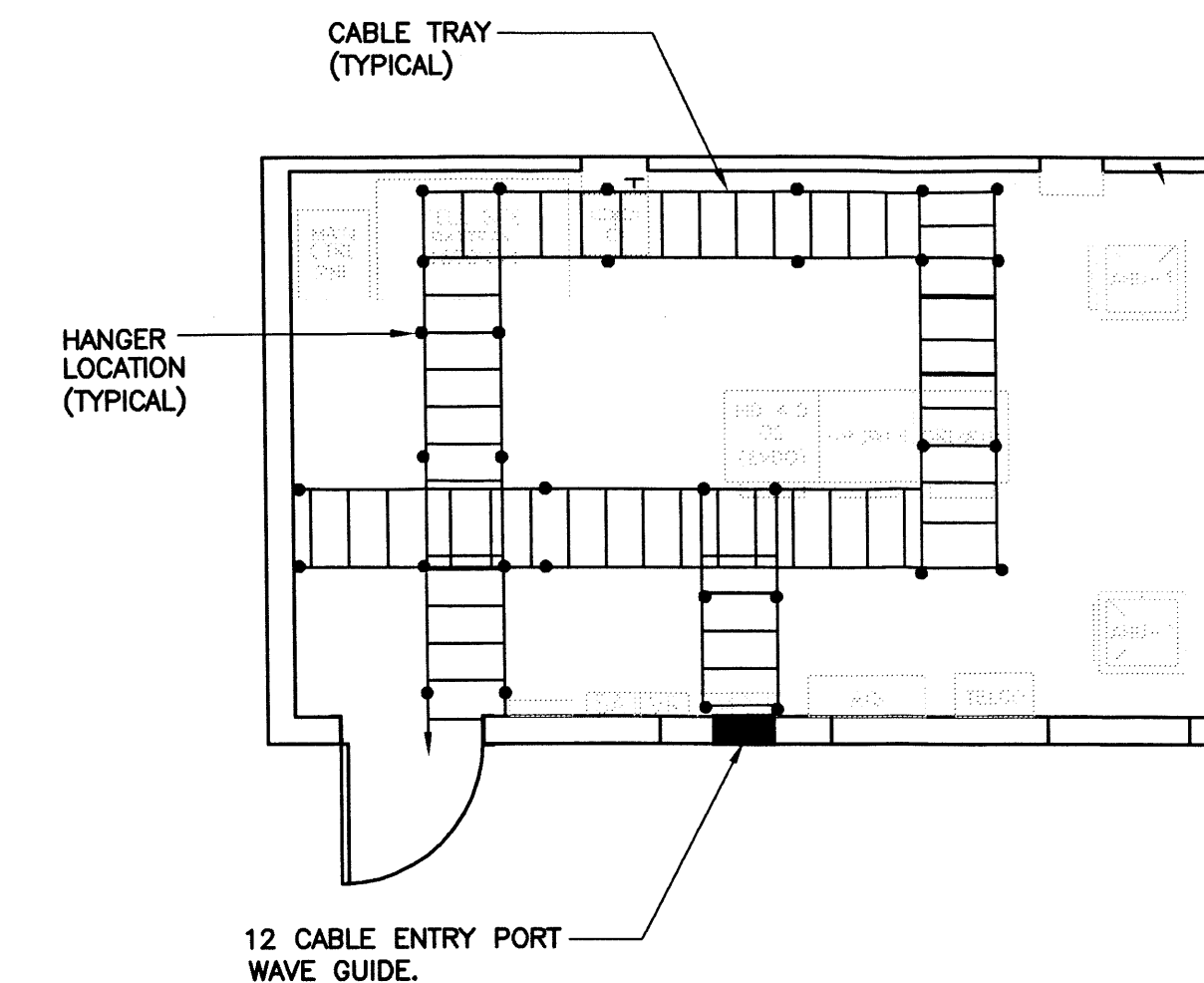
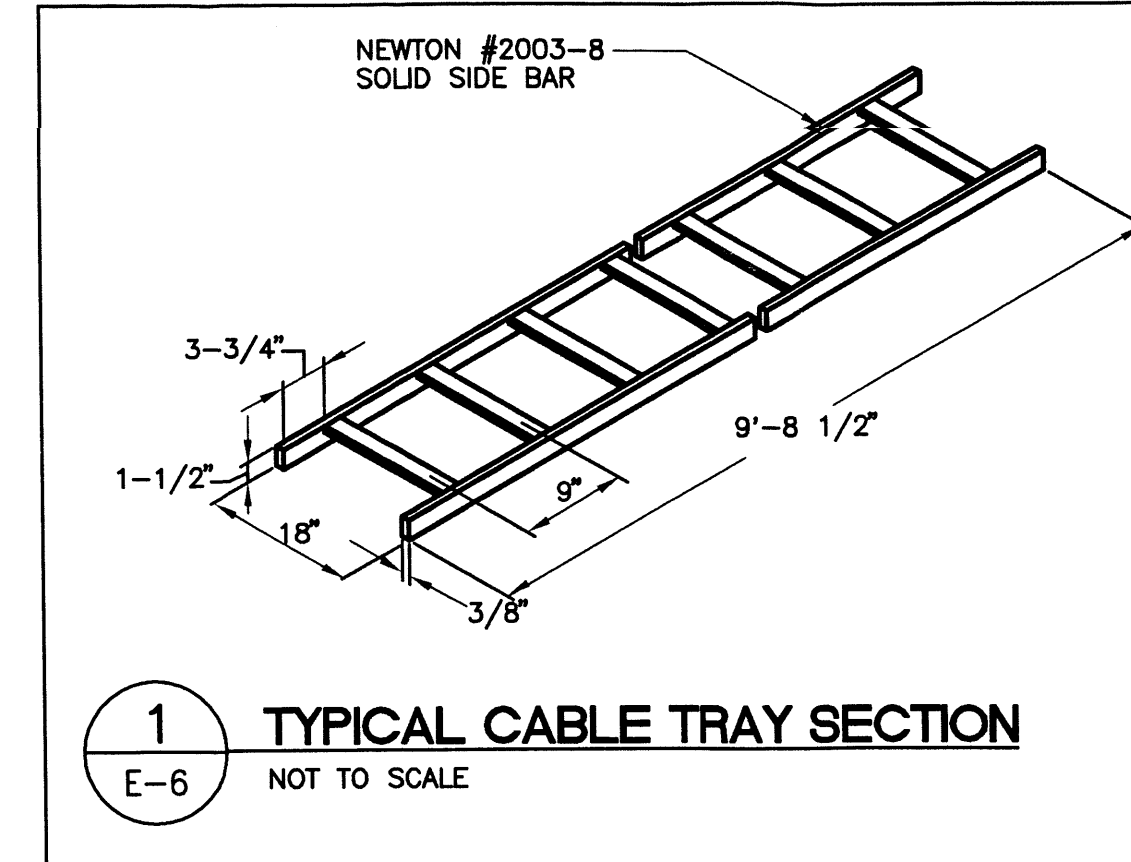
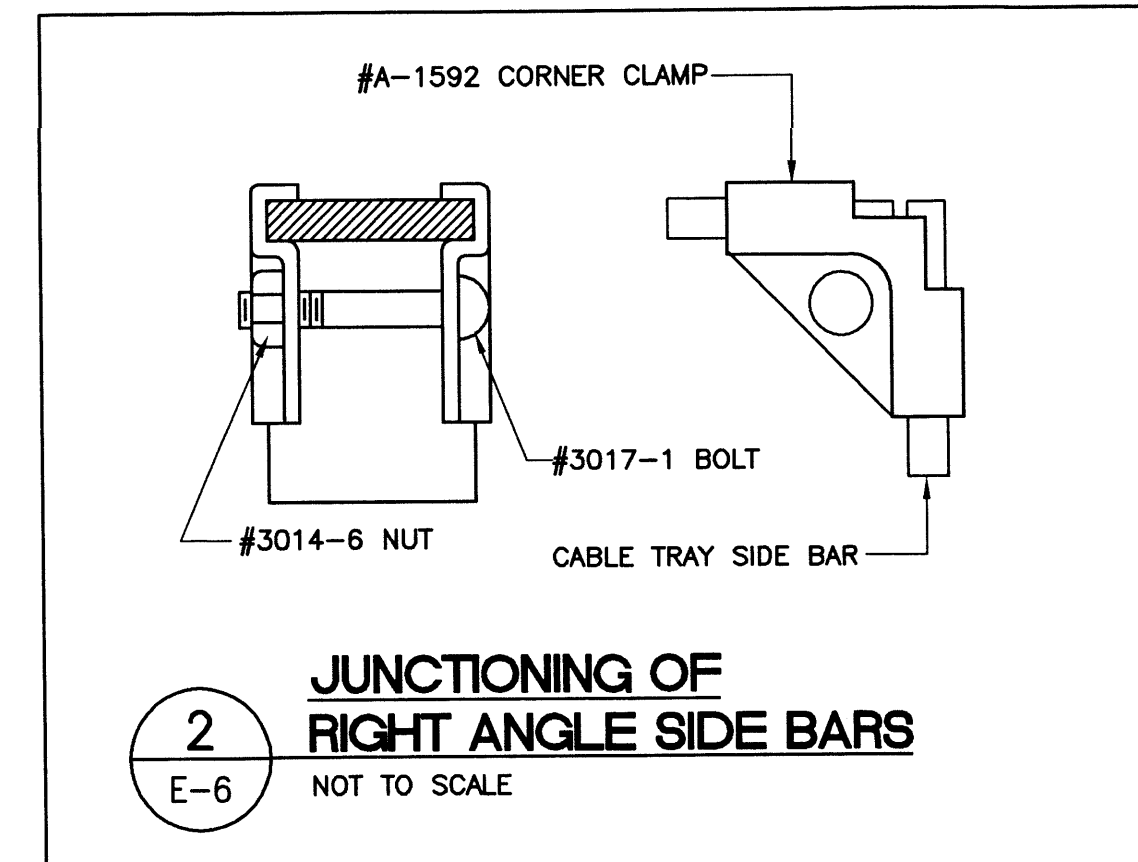
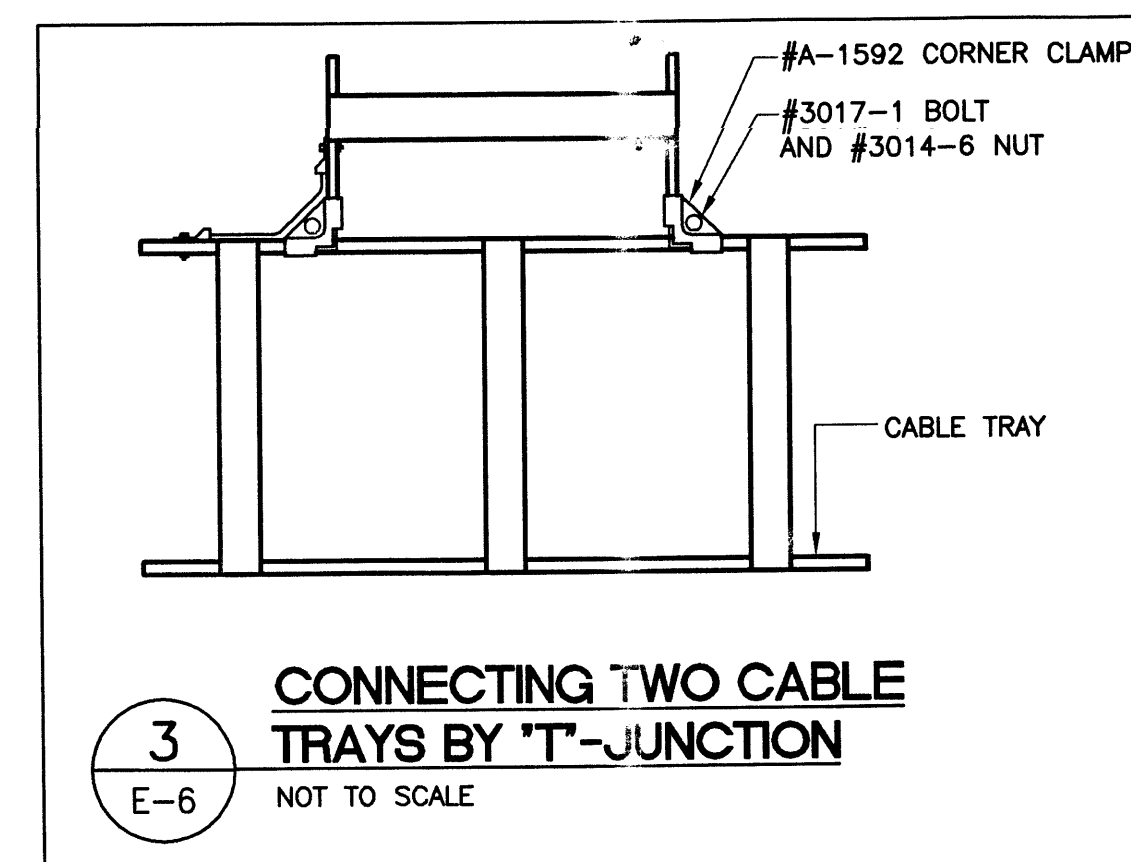
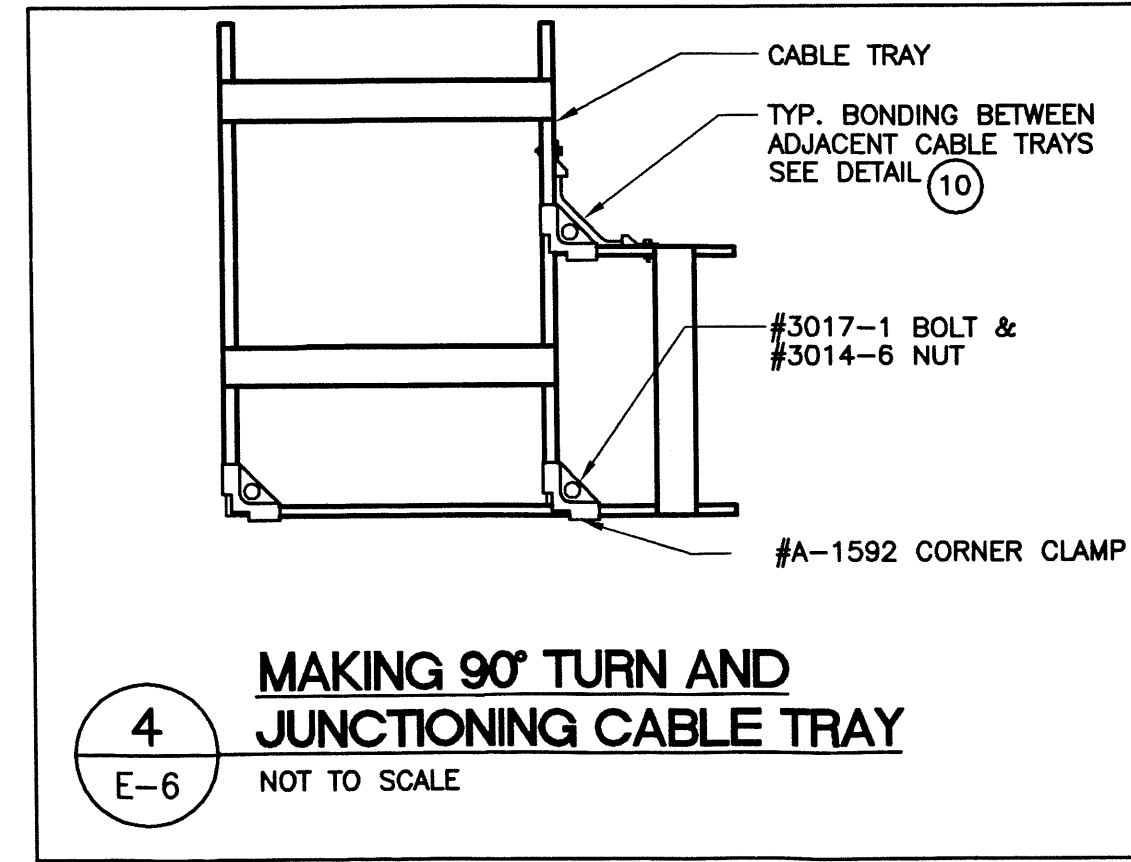
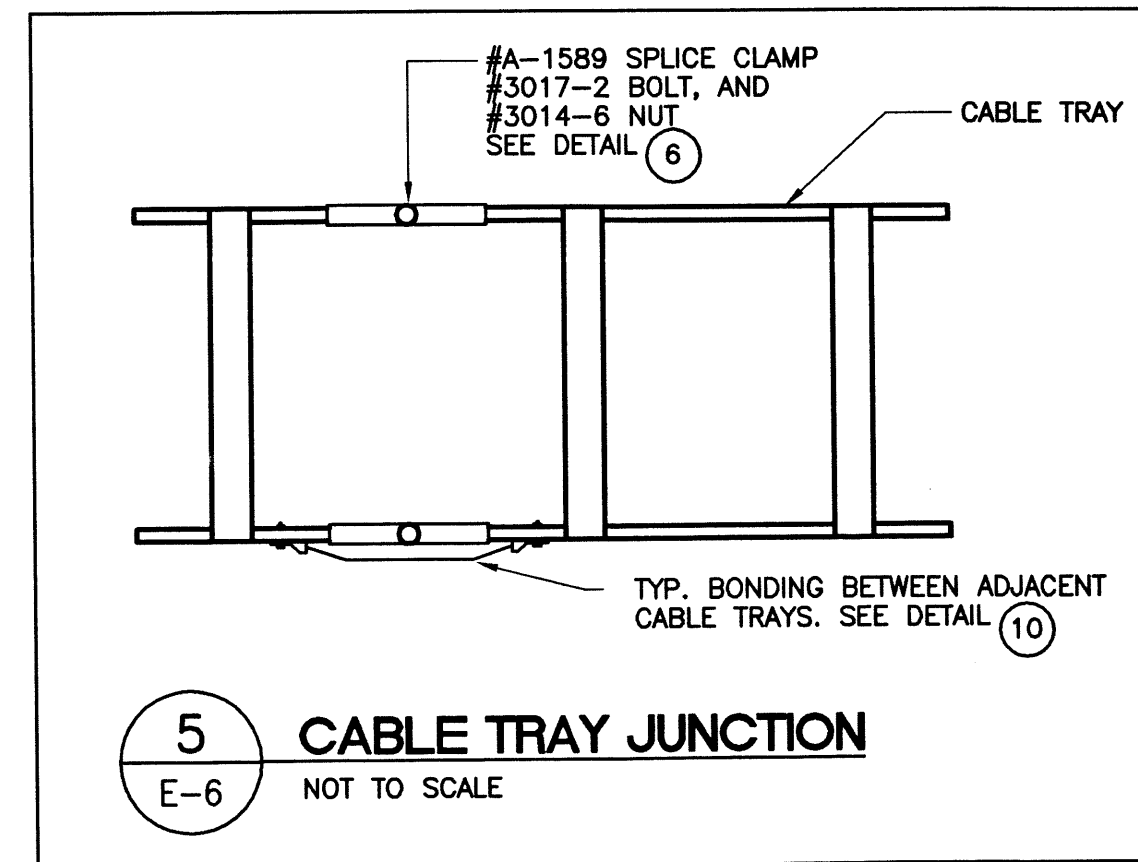
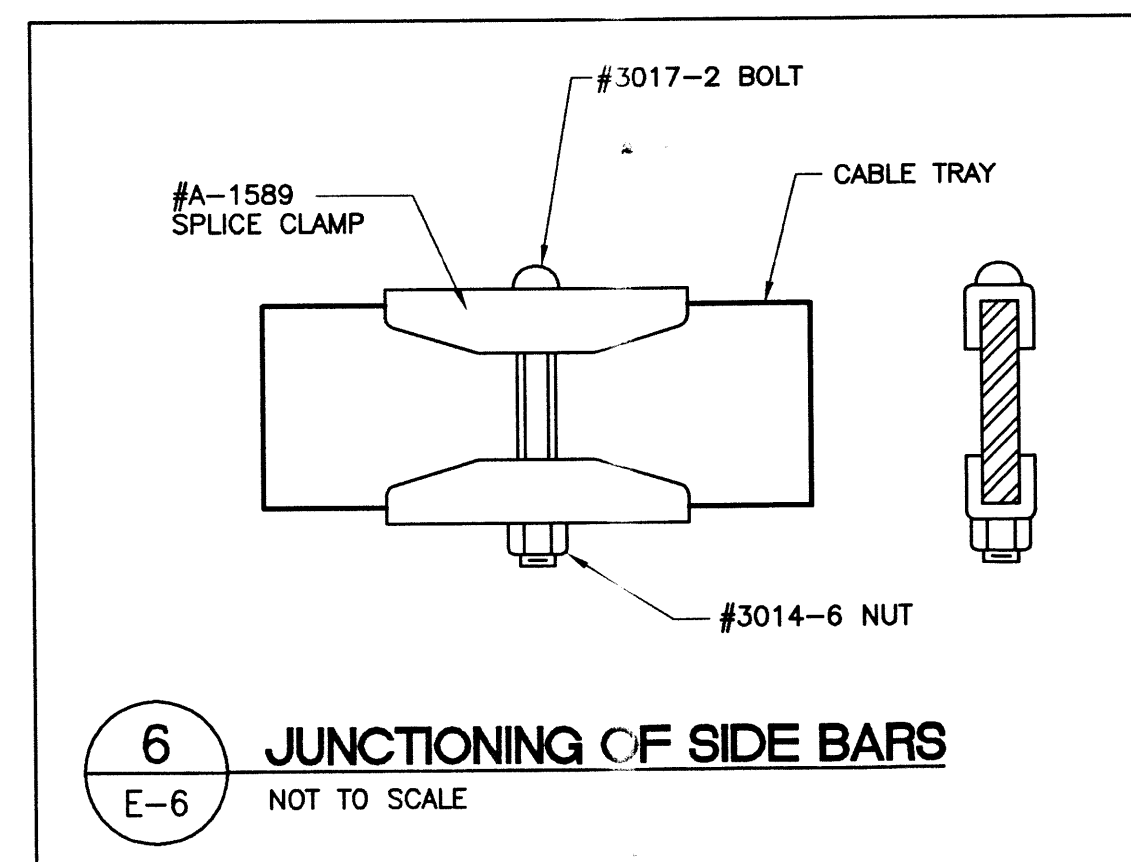
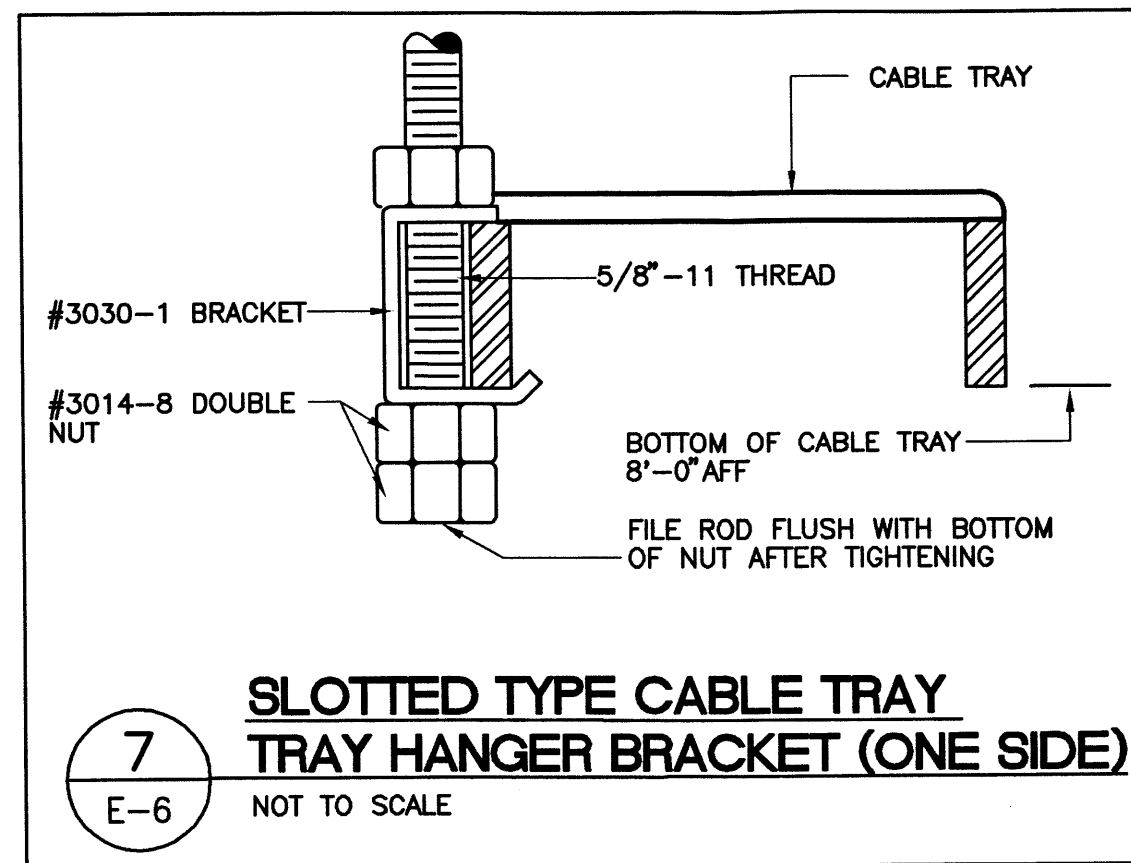
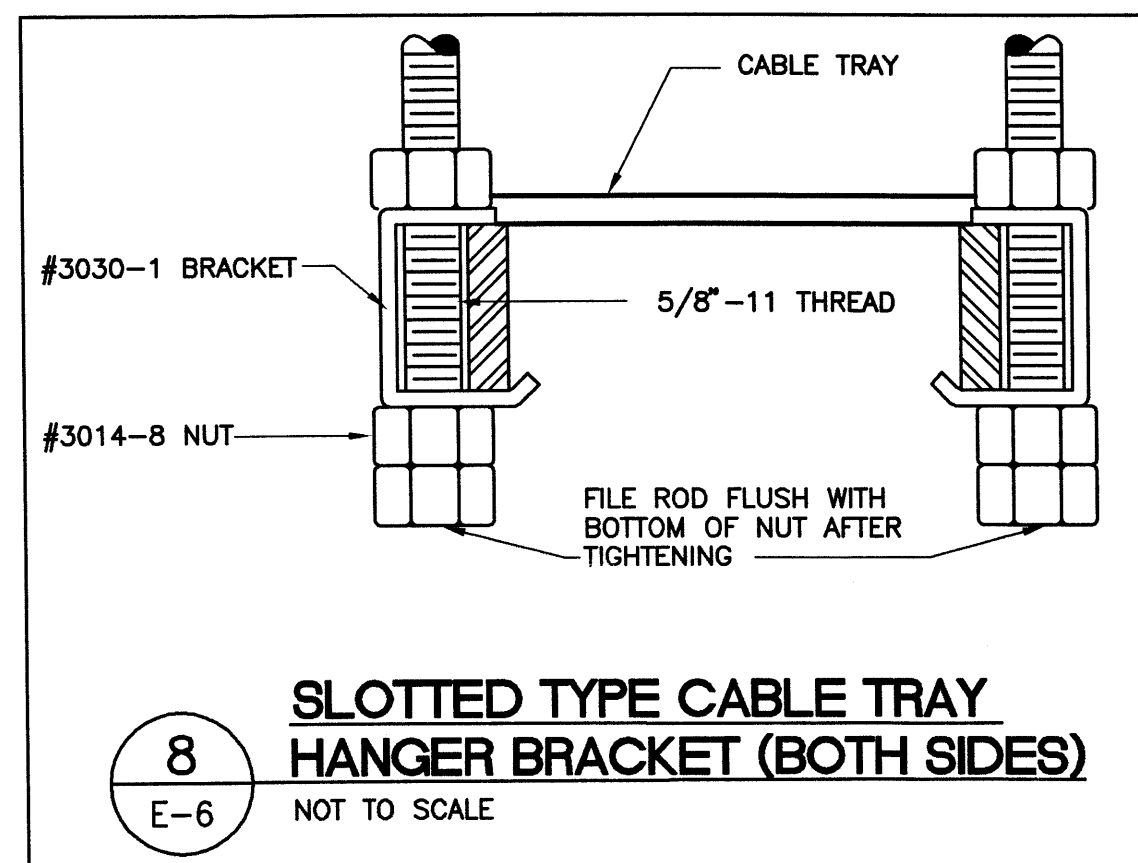
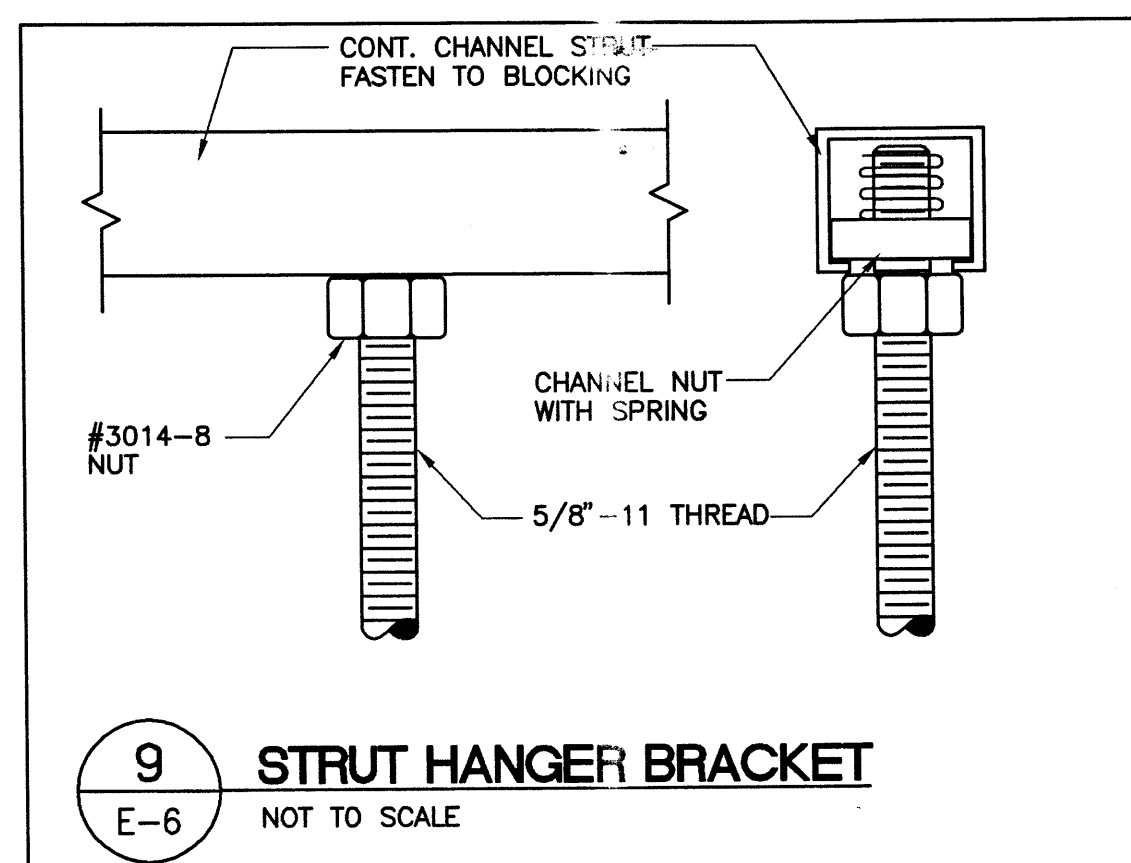
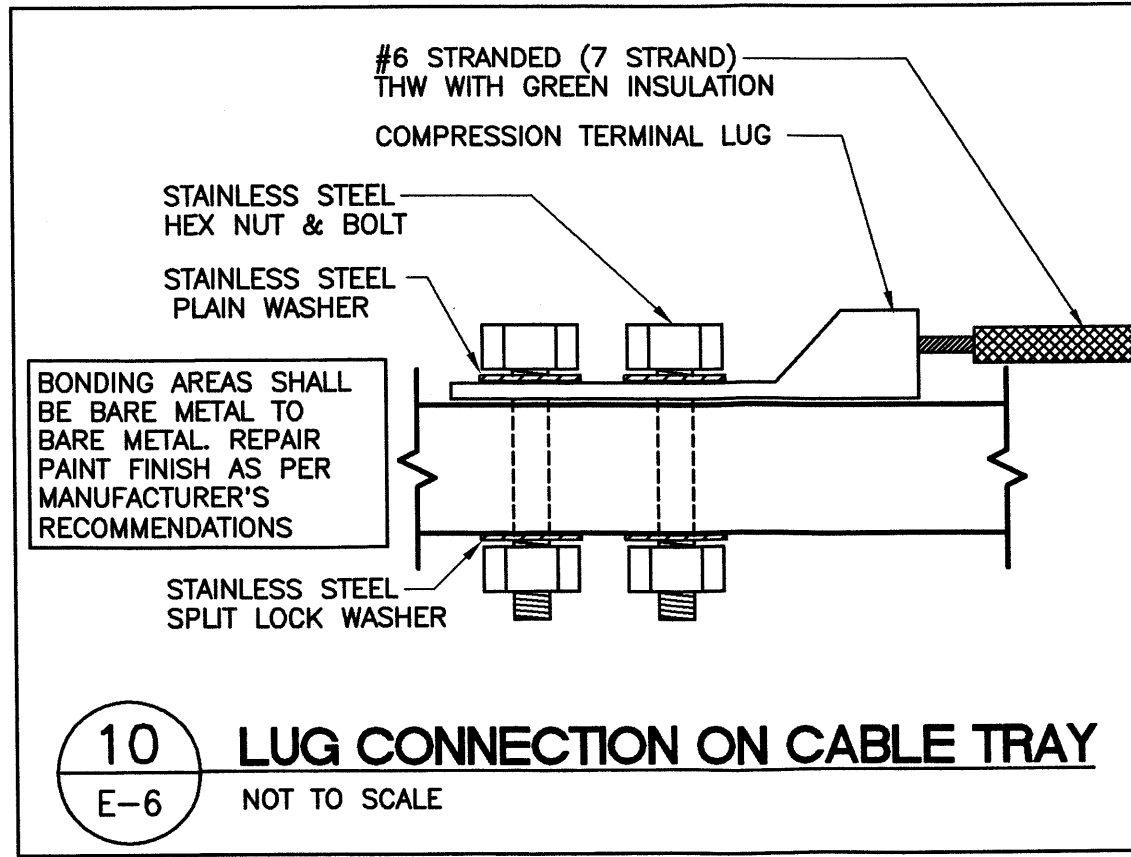
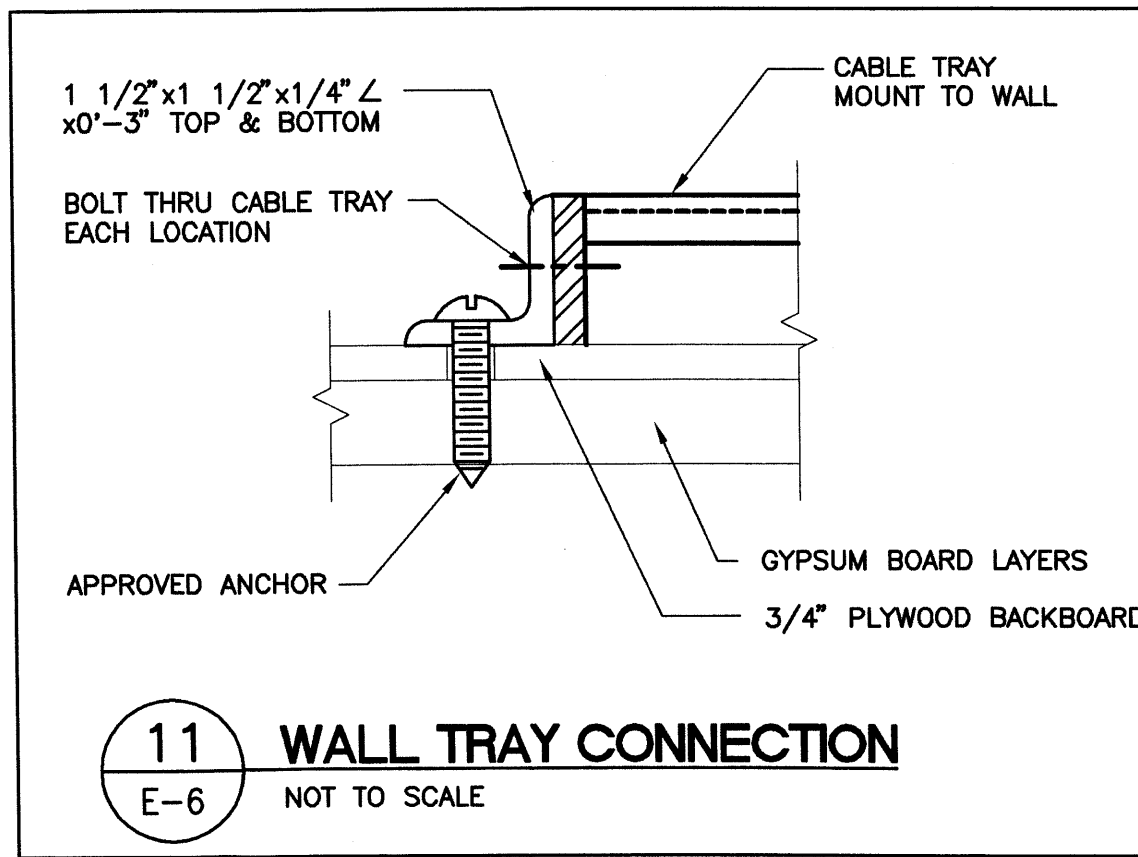
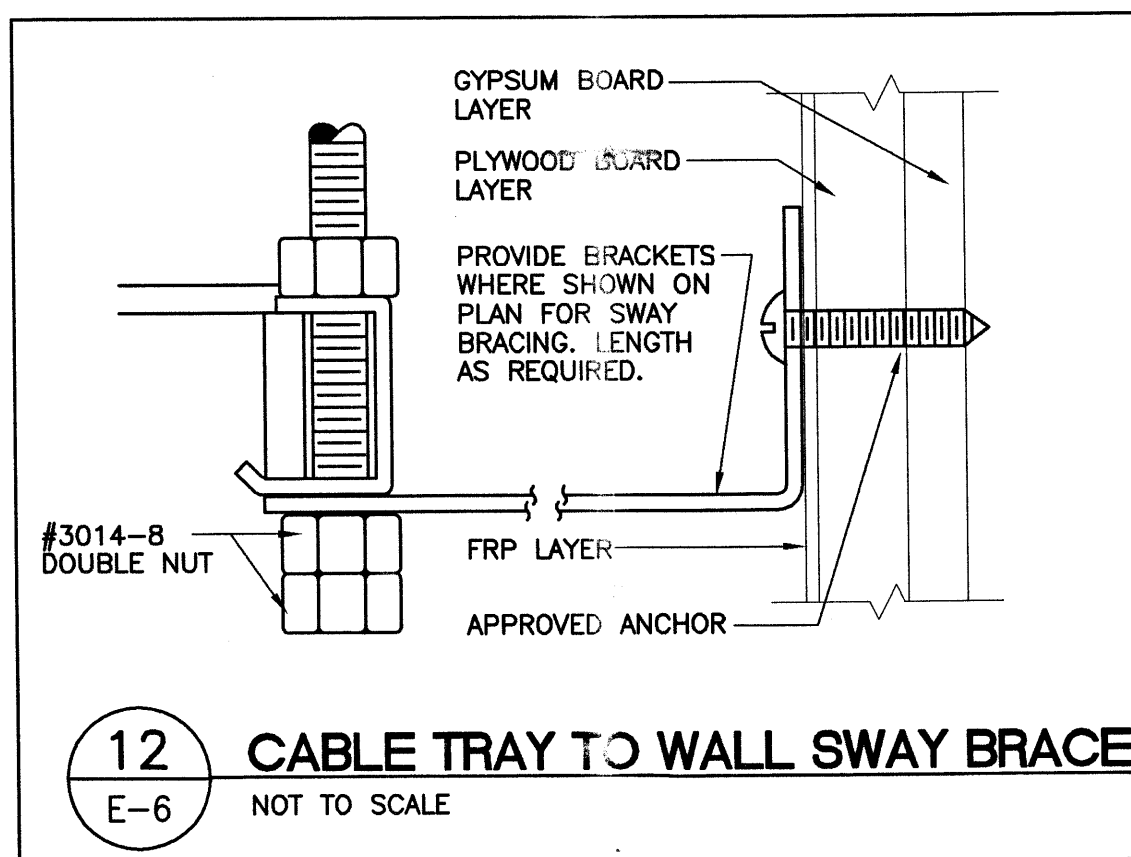


BRACKET FOR GROUND BAR-DIMENSIONS
N.T.S.

2
E-5
MASTER/EQUIPMENT GROUND BAR DETAILS
NOT TO SCALE



1
E-5
EQUIPMENT GROUND BAR DETAILS
NOT TO SCALE

**DRAWING NOTES:**

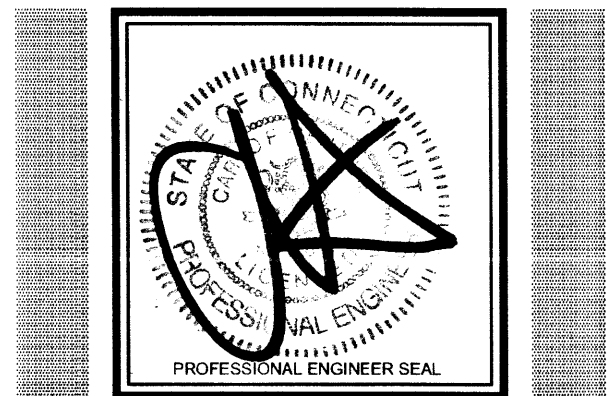
- CABLE TRAY SHALL BE 18" WIDE, SOLID SIDE BAR, GOLD ANODIZED FINISH, AS MANUFACTURED BY NEWTON INSTRUMENT COMPANY, INC. (919-575-6426). REFER TO DETAIL 1.
- REFER TO DETAILS 1 THROUGH 12 FOR APPLICABLE CABLE TRAY INSTALLATION REQUIREMENTS.
- CABLE TRAY SHALL BE SUPPORTED BY "UNISTRUT," ATTACHED TO SUPPORTING CHANNEL VIA THREADED ROD. PROVIDE ALL SUPPORTS, UNISTRUT, HANGERS, ETC. AS REQUIRED FOR COMPLETE INSTALLATION.
- THREADED ROD SUPPORTS FOR THE CABLE TRAY SHALL BE SPACED NO MORE THAN 48" O.C. ON EACH SIDE.
- CABLE TRAY SHALL BE 6" AWAY FROM FINISHED WALLS.
- BOTTOM OF CABLE TRAY SHALL BE 8'-0" A.F.F.
- ADJACENT CABLE TRAYS SHALL BE GROUNDED TOGETHER. REFER TO ELECTRICAL PLAN(S) FOR INTERIOR GROUNDING RING BOND TO CABLE TRAY.
- ALL GROUND CONNECTIONS, CABLE TRAYS SHALL BE COATED WITH AN ANTI-OXIDANT LUBRICANT AFTER BURNISHING AND BEFORE TERMINAL CONNECTIONS ARE MADE.
- CONTRACTOR SHALL FILE SMOOTH EDGES OF CABLE TRAY THAT HAVE BEEN CUT TO LENGTH IN THE FIELD. PAINT MODIFIED CABLE TRAY AS PER MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS.

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Natcomm, LLC - Engineering Consultants
63-2 North Branford Road
Branford, Connecticut 06405
Tel: (203) 488-0580
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NEW FAIRFIELD, CONNECTICUT

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**CABLE TRAY
PLAN AND
DETAILS**

E-6
DWG. 13 OF 14

ELECTRICAL SPECIFICATIONS

SECTION 16010

1.01. SCOPE OF WORK

- A. WORK SHALL INCLUDE ALL LABOR, EQUIPMENT AND SERVICES REQUIRED TO COMPLETE (MAKE READY FOR OPERATION) ALL THE ELECTRICAL WORK INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
- 208Y/120V 3 PHASE 4 WIRE ELECTRIC SERVICE MAIN DISCONNECT AND REVENUE METER.
 - DISTRIBUTION PANELBOARD(S).
 - GENERATOR TRANSFER SWITCH.
 - FEEDERS AND BRANCH CIRCUIT WIRING TO PANELS, RECEPTACLES, EQUIPMENT, LIGHTING FIXTURES, ETC. AS INDICATED OR NOTED ON PLANS.
 - POWER AND TEMPERATURE CONTROL WIRING FOR HVAC EQUIPMENT.
 - FURNISH AND INSTALL ALL POWER WIRING FOR ALL HEATING, VENTILATING, AIR CONDITIONING, MOTORS AND DEVICES, AND FIRE PROTECTION EQUIPMENT INDICATED ON THE PLANS OR CALLED FOR IN THIS SPECIFICATION, EITHER ELECTRICAL OR MECHANICAL INCLUDING ALL CONTROL WIRING. ALL MAGNETIC STARTERS SHALL BE FURNISHED UNDER DIVISION 15 AND HAVE INSTALLED THEREIN A PROPER OVERLOAD HEATER FOR EACH MOTOR.
 - ALL WIRING, BOTH POWER AND CONTROL, FOR SUCH ITEMS AS UNIT HEATERS, EXHAUST FANS, ETC., NOT SPECIFICALLY CALLED FOR IN THE TEMPERATURE CONTROL SPECIFICATIONS, SHALL BE WIRED UNDER DIVISION 16.
 - ALL CONTROLS WHICH ARE TO BE WIRED BY THIS CONTRACTOR SHALL BE DELIVERED TO HIM BY THE CONTRACTOR/VENDOR FURNISHING THEM.
 - CELLULAR SITE ALARMS, ASSOCIATED WIRING AND DEVICES.
 - CELLULAR GROUNDING SYSTEMS, CONSISTING OF ANTENNA GROUNDING, INTERIOR GROUNDING RING, GROUND BARS, ETC.
 - FURNISH AND INSTALL 3/4" PLYWOOD BACKBOARD OF SIZE INDICATED ON DRAWINGS FOR MOUNTING OF POWER/ SERVICE EQUIPMENT AND TELEPHONE/ALARM EQUIPMENT. BACKBOARDS SHALL BE PAINTED WITH TWO (2) COATS OF SEMI-GLOSS GRAY FIRE RETARDANT PAINT.
- B. CONTRACTOR SHALL CONFER WITH LOCAL UTILITY COMPANIES TO ASCERTAIN THE LIMITS OF THEIR WORK AND SHALL INCLUDE IN BID ANY CHARGES OR FEES MADE BY THE UTILITY COMPANIES FOR THEIR PORTION OF THE WORK.

1.02. GENERAL REQUIREMENTS

- A. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE MADE IN STRICT ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND REGULATIONS WHICH MAY APPLY AND NOTHING IN THE DRAWINGS OR SPECIFICATIONS SHALL BE INTERPRETED AS AN INFRINGEMENT OF SUCH CODES OR REGULATIONS.
- B. THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR THE COMPLETE INSTALLATION AND COORDINATION OF THE ENTIRE ELECTRICAL SERVICE. ALL ACTIVITIES TO BE COORDINATED THROUGH BELL ATLANTIC MOBILE REPRESENTATIVE, DESIGN ENGINEER AND OTHER AUTHORITIES HAVING JURISDICTION OF TRADES.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND PAY ALL FEES AS MAY BE REQUIRED FOR THE ELECTRICAL WORK AND FOR SCHEDULING OF ALL INSPECTIONS AS MAY BE REQUIRED BY THE LOCAL AUTHORITY.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE BUILDING OWNER FOR NEW AND/OR DEMOLITION WORK INVOLVED.
- E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH LOCAL TELEPHONE COMPANY AS MAY BE REQUIRED FOR THE INSTALLATION OF TELEPHONE SERVICE TO THE PROPOSED CELLULAR SITE.
- F. NO MATERIAL OTHER THAN THAT CONTAINED IN THE "LATEST LIST OF ELECTRICAL FITTINGS" APPROVED BY THE UNDERWRITERS' LABORATORIES, SHALL BE USED IN ANY PART OF THE WORK. ALL MATERIAL FOR WHICH LABEL SERVICE HAS BEEN ESTABLISHED SHALL BEAR THE U.L. LABEL.
- G. THE CONTRACTOR SHALL GUARANTEE ALL NEW WORK FOR A PERIOD OF ONE YEAR FROM THE ACCEPTANCE DATE BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WARRANTIES FROM ALL EQUIPMENT MANUFACTURERS FOR SUBMISSION TO THE OWNER.
- H. DRAWINGS INDICATE GENERAL ARRANGEMENT OF WORK INCLUDED IN CONTRACT. CONTRACTOR SHALL WITHOUT EXTRA CHARGE, MAKE MODIFICATIONS TO THE LAYOUT OF THE WORK TO PREVENT CONFLICT WITH WORK OF OTHER TRADES AND FOR THE PROPER INSTALLATION OF WORK. CHECK ALL DRAWINGS AND VISIT JOB SITE TO VERIFY SPACE AND TYPE OF EXISTING CONDITIONS IN WHICH WORK WILL BE DONE, PRIOR TO SUBMITTAL OF BID.
- I. THE ELECTRICAL CONTRACTOR SHALL SUPPLY THREE (3) COMPLETE SETS OF APPROVED DRAWINGS, ENGINEERING DATA SHEETS, MAINTENANCE AND OPERATING INSTRUCTION MANUALS FOR ALL SYSTEMS AND THEIR RESPECTIVE EQUIPMENT. THESE MANUALS SHALL BE INSERTED IN VINYL COVERED 3-RING BINDERS AND TURNED OVER TO OWNER'S REPRESENTATIVE ONE (1) WEEK PRIOR TO FINAL PUNCH LIST.
- J. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER AND WILL BE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
- K. ALL EQUIPMENT AND MATERIALS TO BE INSTALLED SHALL BE NEW, UNLESS OTHERWISE NOTED.
- L. BEFORE FINAL PAYMENT, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PRINTS (AS-BUILTS), LEGIBLY MARKED IN RED PENCIL TO SHOW ALL CHANGES FROM THE ORIGINAL PLANS.
- M. PROVIDE TEMPORARY POWER AND LIGHTING IN WORK AREAS AS REQUIRED.
- N. SHOP DRAWINGS
- CONTRACTOR SHALL SUBMIT SIX (6) COPIES OF SHOP DRAWINGS ON ALL EQUIPMENT AND MATERIALS PROPOSED FOR USE ON THIS PROJECT, GIVING ALL DETAILS, WHICH INCLUDE DIMENSIONS, CAPACITIES, ETC.
 - CONTRACTOR SHALL SUBMIT SIX (6) COPIES OF ALL TEST REPORTS CALLED FOR IN THE SPECIFICATIONS AND DRAWINGS.

SECTION 16111

1.01. CONDUIT

- A. MINIMUM CONDUIT SIZE FOR BRANCH CIRCUITS, LOW VOLTAGE CONTROL AND ALARM CIRCUITS SHALL BE 3/4" ALL CONDUIT RUNS LOCATED WITHIN THE VERIZON WIRELESS EQUIPMENT ROOM, SHALL ORIGINATE FROM THE WIREWAY AND RUN VERTICALLY TO ITS DESTINATION. NO BENDS WILL BE ACCEPTED. CONDUITS SHALL BE PROPERLY FASTENED TO THE WALLS AND CEILINGS AS REQUIRED BY THE N.E.C.
- CONDUIT MATERIAL SHALL BE AS FOLLOWS:
- ELECTRIC METALLIC TUBING (EMT) - BRANCH CIRCUITS INSIDE VERIZON WIRELESS ROOM
 - GALVANIZED RIGID CONDUIT (GRC) - FEEDERS AND CIRCUITS EXPOSED TO EXTERIOR & UNDERGROUND.
 - LIQUID TIGHT FLEXIBLE METAL CONDUIT - FOR SHORT LENGTH (MAX. 3'-0") WIRING TO VIBRATING EQUIPMENT (HVAC UNITS, MOTORS, ETC.) IN WET LOCATIONS.
 - FLEXIBLE METAL CONDUIT - FOR SHORT LENGTH (MAX. 3'-0") WIRING TO VIBRATING EQUIPMENT IN DRY LOCATIONS.
 - PVC CONDUIT - WHERE SHOWN ON GROUNDING DETAILS.

SECTION 16114

1.01. CABLE TRAY

- A. CABLE TRAY SHALL BE SOLID SIDE BAR, 18" WIDE (NEWTON INSTRUMENT COMPANY, INC.). TRAY SHALL BE INSTALLED AS SHOWN ON CONTRACT DOCUMENTS. CROSSWISE RUNS SHALL BE COORDINATED WITH THE SPECIFIC EQUIPMENT THE TRAY SHALL SERVE. ALL PROTRUDING CABLE TRAY SUPPORT RODS SHALL BE FILED SMOOTH WITH NO SHARP EDGES. ALL SUPPORT RODS SHALL BE CAD-PLATED FOR RUST RESISTANCE AND A MINIMUM 1/2" DIAMETER.

SECTION 16113

1.01. WIREWAYS

- A. THE 4" X 4" WIREWAY LOCATED IN THE VERIZON WIRELESS EQUIPMENT ROOM SHALL BE INSTALLED ALONG THE TOP OF THE INTERIOR WALL AND SHALL HAVE ONE VERTICAL DROP CONNECTOR TO PANELBOARD. MANUFACTURER SHALL BE HOFFMAN ENGINEERING COMPANY OR APPROVED EQUAL.

SECTION 16123

1.01. CONDUCTORS

- A. ALL CONDUCTORS SHALL BE TYPE THWN (INT. APPLICATION) AND XHHW (EXT. APPLICATION), 75 DEGREE C, 600 VOLT INSULATION, SOFT ANNEALED STRANDED COPPER. #10 AWG AND SMALLER SHALL BE SPLICED USING ACCEPTABLE SOLDERLESS CROW-FOOT CONNECTORS. #8AWG AND LARGER SHALL BE SPLICED USING COMPRESSION SPLIT-BOLT TYPE CONNECTORS. #12 AWG SHALL BE THE MINIMUM SIZE CONDUCTOR FOR LINE VOLTAGE BRANCH CIRCUITS. REFER TO PANEL SCHEDULE FOR BRANCH CIRCUIT CONDUCTOR SIZE(S). CONDUCTORS SHALL BE COLOR CODED FOR CONSISTENT PHASE IDENTIFICATION:
- | 208Y/120 VAC-3 PHASE, 4 WIRE SYSTEM | LINE | COLOR |
|-------------------------------------|------|------------------|
| | A | BLACK |
| | B | RED |
| | C | BLUE |
| | N | CONTINUOUS WHITE |
| | G | CONTINUOUS GREEN |
- B. MINIMUM BENDING RADIUS FOR CONDUCTORS SHALL BE 12 TIMES THE LARGEST DIAMETER OF BRANCH CIRCUIT CONDUCTOR.

SECTION 16130

1.01. BOXES

- A. FURNISH AND INSTALL OUTLET BOXES FOR ALL DEVICES, SWITCHES, RECEPTACLES, ETC.. BOXES TO BE ZINC COATED STEEL.
- B. FURNISH AND INSTALL PULL BOXES IN MAIN FEEDERS RUNS WHERE REQUIRED. PULL BOXES SHALL BE GALVANIZED STEEL WITH SCREW REMOVABLE COVERS, SIZE AND QUANTITY AS REQUIRED. PROVIDE WEATHERPROOF CONSTRUCTION IN WET LOCATIONS.

SECTION 16140

1.01. WIRING DEVICES

- A. THE FOLLOWING LIST IS PROVIDED TO CONVEY THE QUALITY AND RATING OF WIRING DEVICES WHICH ARE TO BE INSTALLED. A COMPLETE LIST OF ALL DEVICES MUST BE SUBMITTED BEFORE INSTALLATION FOR APPROVAL.
- | |
|--------------------------------------------------------------------------|
| 15 MINUTE TIMER SWITCH - INTERMATIC #FF15M (INTERIOR LIGHTS) |
| DUPLEX RECEPTACLE - P&S #2091-S (GFCI) SPECIFICATION GRADE |
| SINGLE POLE SWITCH - P&S #5021-1 (20A-120V HARD USE) SPECIFICATION GRADE |
| DUPLEX RECEPTACLE - P&S #5342-1 (20A-120V HARD USE) SPECIFICATION GRADE |
- B. PLATES - ALL PLATES USED SHALL BE CORROSION RESISTANT TYPE 304 STAINLESS STEEL. PLATES SHALL BE FROM SAME MANUFACTURER AS SWITCHES AND RECEPTACLES. PROVIDE WEATHERPROOF HOUSING FOR DEVICES LOCATED IN WET LOCATIONS.
- C. OTHER MANUFACTURERS OF THE SWITCHES, RECEPTACLES AND PLATES MAY BE SUBMITTED FOR APPROVAL BY THE ENGINEER.

SECTION 16170

1.01. DISCONNECT SWITCHES

- A. FUSIBLE AND NON-FUSIBLE, 600V, HEAVY DUTY DISCONNECT SWITCHES SHALL BE AS MANUFACTURED BY SQUARE D. PROVIDE FUSES AS CALLED FOR ON THE CONTRACT DRAWINGS. AMPERE RATING SHALL BE CONSISTENT WITH LOAD BEING SERVED. DISCONNECT SWITCH COVER SHALL BE MECHANICALLY INTERLOCKED TO PREVENT COVER FROM OPENING WHEN THE SWITCH IS IN THE "ON" POSITION. EXTERIOR APPLICATIONS SHALL BE NEMA 3R CONSTRUCTION WITH PADLOCK FEATURE.

SECTION 16190

1.01. SEISMIC RESTRAINT

- A. ALL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH ZONE 2 SEISMIC REQUIREMENTS.

SECTION 16195

1.01. LABELING AND IDENTIFICATION NOMENCLATURE FOR ELECTRICAL EQUIPMENT

- A. CONTRACTOR SHALL FURNISH AND INSTALL NON-METALLIC ENGRAVED BACK-LIT NAMEPLATES ON ALL PANELS AND MAJOR ITEMS OF ELECTRICAL EQUIPMENT.
- B. LETTERS TO BE WHITE ON BLACK BACKGROUND WITH LETTERS 1- 1/2 INCH HIGH WITH 1/4 INCH MARGIN.
- C. IDENTIFICATION NOMENCLATURE SHALL BE IN ACCORDANCE WITH BELL ATLANTIC MOBILE.
- D. PROVIDE NAMEPLATE FOR PORTABLE ENGINE/GENERATOR CONNECTION SHOWING VOLTAGE KVA/KW RATING, # PHASE AND # OF WIRES. PLATE TO BE PLASTIC ENGRAVED, RED WITH WHITE LETTERS.
- E. ALL RECEPTACLES, SWITCHES, DISCONNECT SWITCHES, ETC. SHALL BE LABELED WITH THE CORRECT BRANCH CIRCUIT NUMBER SERVED BY MEANS OF PERMANENT PRESSED TYPE BLACK 1/4" TRANSFER LETTERING. (FOR EXAMPLE: "MDP-5", ETC.).

SECTION 16450

1.01. GROUNDING

- A. ALL NON-CURRENT CARRYING PARTS OF THE ELECTRICAL AND TELEPHONE CONDUIT SYSTEMS SHALL BE MECHANICALLY AND ELECTRICALLY CONNECTED TO PROVIDE AN INDEPENDENT RETURN PATH TO THE EQUIPMENT GROUNDING SOURCES.
- B. GROUNDING SYSTEM WILL BE IN ACCORDANCE WITH THE LATEST ACCEPTABLE EDITION OF THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS PER LOCAL INSPECTOR HAVING JURISDICTION.
- C. GROUNDING OF PANELBOARDS:
- PANELBOARD SHALL BE GROUNDED BY TERMINATING THE PANELBOARD FEEDER'S EQUIPMENT GROUND CONDUCTOR TO THE EQUIPMENT GROUND BAR KIT(S) LUGGED TO THE CABINET. ENSURE THAT THE SURFACE BETWEEN THE KIT AND CABINET ARE BARE METAL TO BARE METAL. PRIME AND PAINT OVER TO PREVENT CORROSION.
 - CONDUIT(S) TERMINATING INTO THE PANELBOARD SHALL HAVE GROUNDING TYPE BUSHINGS. THE BUSHINGS SHALL BE BONDED TOGETHER WITH BARE #10 AWG COPPER CONDUCTOR WHICH IN TURN IS TERMINATED INTO THE PANELBOARD'S EQUIPMENT GROUND BAR KIT(S).
- D. EQUIPMENT GROUNDING CONDUCTOR:
- EACH EQUIPMENT GROUND CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. ARTICLE 250-122.
 - THE MINIMUM SIZE OF EQUIPMENT GROUND CONDUCTOR SHALL BE NO. 12 AWG COPPER.
 - REFER TO PANEL SCHEDULE "BRANCH CIRCUIT" DATA FOR EQUIPMENT GROUND CONDUCTOR SIZE FOR EACH BRANCH CIRCUIT.
 - EACH FEEDER OR BRANCH CIRCUIT SHALL HAVE EQUIPMENT GROUND CONDUCTOR(S) INSTALLED IN THE SAME RACEWAY(S).
- E. CELLULAR GROUNDING SYSTEM:
- CONTRACTOR SHALL PROVIDE A CELLULAR GROUNDING SYSTEM WITH THE MAXIMUM AC RESISTANCE TO GROUND OF 5 OHM BETWEEN ANY POINT ON THE GROUNDING SYSTEM AS MEASURED BY 3-POINT GROUNDING TEST. (REFER TO SECTION 16960).
- PROVIDE THE CELLULAR GROUNDING SYSTEM AS SPECIFIED ON DRAWINGS, INCLUDING, BUT NOT LIMITED TO:
- GROUND BARS
 - INTERIOR GROUND RING
 - EXTERIOR GROUNDING WHERE REQUIRED DUE TO MEASURED AC RESISTANCE GREATER THAN SPECIFIED.)
 - ANTENNA GROUND CONNECTIONS AND PLATES.
- F. CONTRACTOR, AFTER COMPLETION OF THE COMPLETE GROUNDING SYSTEM BUT PRIOR TO CONCEALMENT/BURIAL OF SAME, SHALL NOTIFY VERIZON WIRELESS PROJECT ENGINEER WHO WILL HAVE A DESIGN ENGINEER VISIT SITE AND MAKE A VISUAL INSPECTION OF THE GROUNDING GRID AND CONNECTIONS OF THE SYSTEM.

SECTION 16470

1.01. DISTRIBUTION EQUIPMENT

- A. REFER TO CONTRACT DRAWINGS FOR DETAILS AND SCHEDULES.

SECTION 16477

1.01. FUSES

- A. FUSES SHALL BE NONRENEWABLE TYPE AS MANUFACTURED BY "BUSSMAN" OR APPROVED EQUAL. FUSES RATED 1/10 AMPERE UP TO 600 AMPERES SHALL BE EQUIVALENT TO BUSSMAN TYPE LPN-RK (250V) UL CLASS RK1, LOW PEAK, DUAL ELEMENT, TIME-DELAY FUSES. FUSES SHALL HAVE SEPARATE SHORT CIRCUIT AND OVERLOAD ELEMENTS AND HAVE AN INTERRUPTING RATING OF 200 KAC. UPON COMPLETION OF WORK PROVIDE ONE SPARE SET OF FUSES FOR EACH TYPE INSTALLED.

SECTION 16500

1.01. LIGHTING FIXTURES

- A. REFER TO LIGHT FIXTURE SCHEDULE FOR REQUIREMENTS.

SECTION 16700

1.01. BUILDING ALARMS (SIGNAL COMMUNICATIONS)

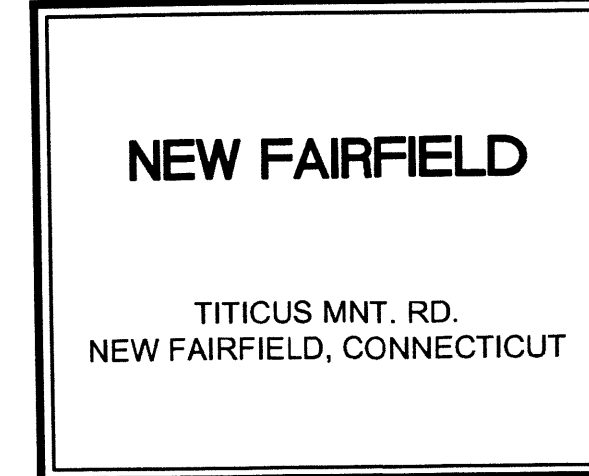
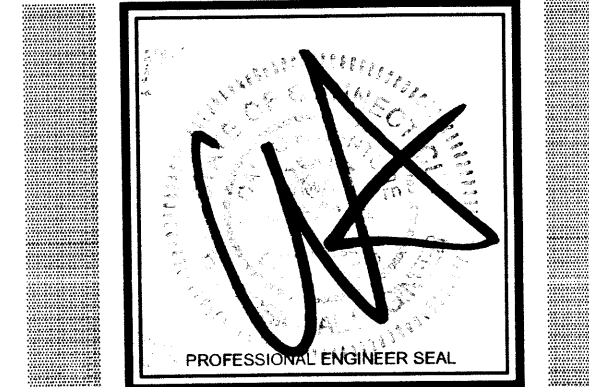
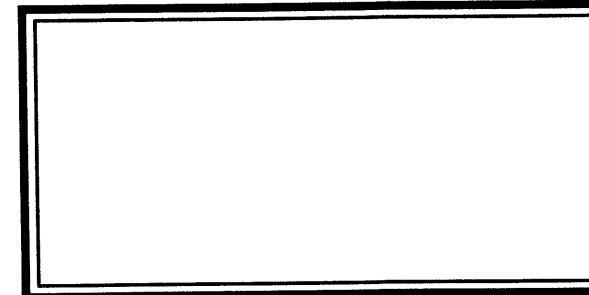
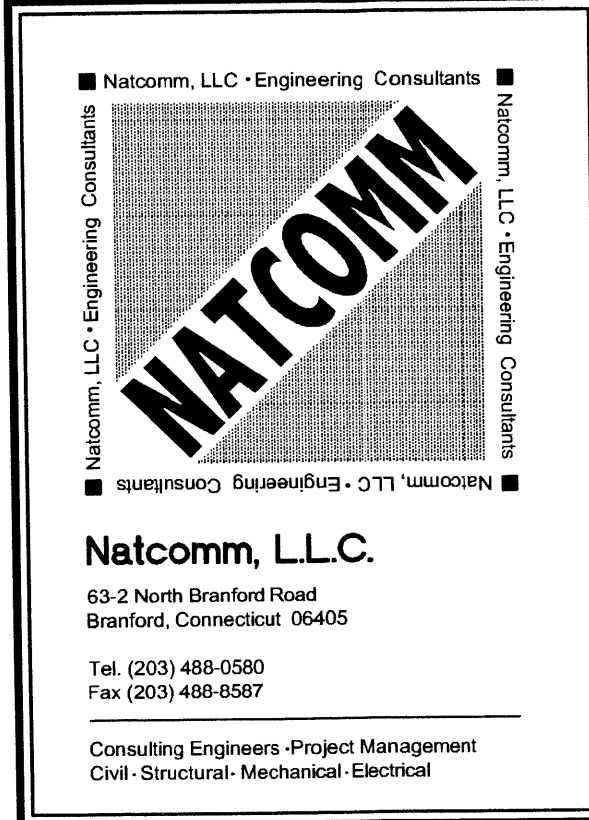
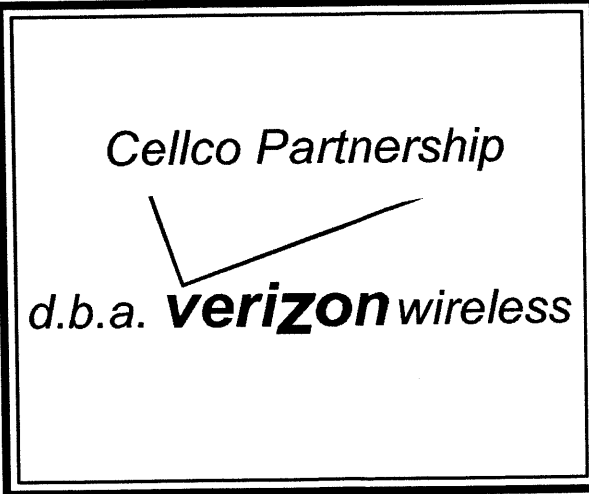
- A. ALARM BOX SHALL BE 12"W X 12"H X 6"D NEMA 1 ENCLOSURE, MCKINSTRY #30-12126LP WITH ACCESSORIES:
- "T" HANDLE LATCH KIT
 - 14 GAUGE STEEL PANEL, PAINTED WHITE ENAMEL
 - (6) 1/2"-3/4" K.O.S ON EACH SIDE/TOP/BOTTOM WALLS
 - (2) 3/4" RUBBER GROMMETS AS SLEEVES.
 - PROVIDE WIRING SCHEMATIC IN REMOVABLE PLASTIC COVER, TAPED TO BACK SIDE OF HINGED DOOR.
- B. ALARM SENSORS' RELAY SHALL BE NORMALLY CLOSED. UPON ALARM CONDITION THE RELAY SHALL REVERSE STATE TO OPEN. CONFIRM INSTALLATION AND LOCATION REQUIREMENTS FOR BUILDING'S ALARM SENSORS.
- ALARM SENSORS SHALL BE:
- SMOKE DETECTORS (ASI ELECTRONICS #ESAS011): 120VAC IONIZATION TYPE WITH NO BATTERY BACK-UP.
 - DOOR CONTACT SENSOR (SENTROL #1085T): SPDT MAGNETIC FORM C CONTACT - OPEN/CLOSE LOOP, MAX. 1" GAP.
 - LOW TEMPERATURE SENSOR (HONEYWELL #T631C1103): SPDT AIR SWITCH CONTROLLER - COILED COPPER TUBE IN NEMA 1 ENCLOSURE. SET AT 50 DEGREES F., MOUNT LAMINATED BACK-LIT NAMEPLATE WITH LEGIBLE DESCRIPTION "LOW TEMP 50 DEGREE F" BELOW SENSOR.
 - HIGH TEMPERATURE SENSOR (HONEYWELL #T631C1103): SPDT AIR SWITCH CONTROLLER - COILED COPPER TUBE IN NEMA 1 ENCLOSURE. SET AT 80 DEGREES F., MOUNT LAMINATED BACK-LIT NAMEPLATE WITH LEGIBLE DESCRIPTION "HI TEMP 80 DEGREES F" BELOW SENSOR.
- C. CONFIRM REQUIREMENTS FOR ALL BUILDING ALARM SENSORS INSTALLATION, AND LOCATION OF EACH SENSOR. ALARM WIRING SHALL BE ROUTED TO ALARM BOX AND SPADE CONNECTED TO RESPECTIVE TERMINAL BLOCK. EACH PAIR OF ALARM WIRING SHALL BE PERMANENTLY AND UNIQUELY TAGGED AT EACH TERMINAL STRIP LOCATION AND AT SPLICE/JUNCTION/BOXES/ WIRING TROUGH.
- D. REFER TO "WIRING SCHEMATIC FOR ALARM SENSORS" ON DRAWINGS.

SECTION 16960

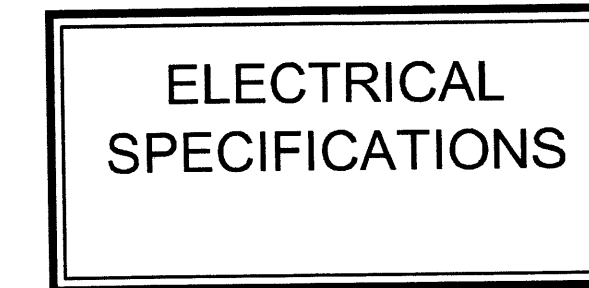
1.01. TESTS BY INDEPENDENT ELECTRICAL TESTING FIRM

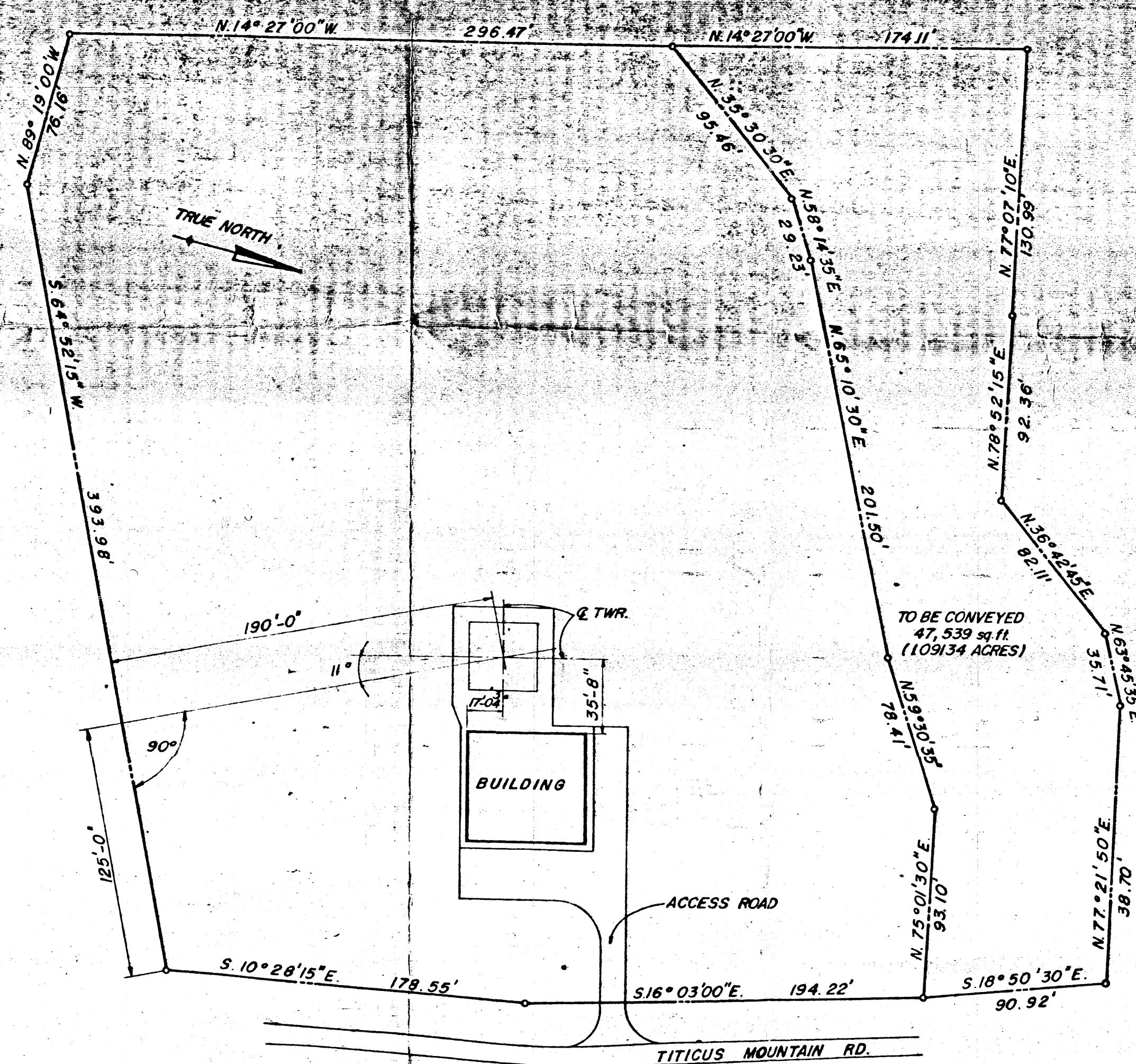
- A. CONTRACTOR SHALL RETAIN THE SERVICES OF A LOCAL INDEPENDENT ELECTRICAL TESTING FIRM (WITH MINIMUM 5 YEARS COMMERCIAL EXPERIENCE IN THE ELECTRICAL TESTING INDUSTRY) AS SPECIFIED BY VERIZON WIRELESS TO PERFORM:
- TEST 1: THERMAL OVERLOAD AND MAGNETIC TRIP TEST, AND CABLE INSULATION TEST FOR ALL CIRCUIT BREAKERS RATED 100 AMPS OR GREATER.
- TEST 2: RESISTANCE TO GROUND TEST ON THE CELLULAR GROUNDING SYSTEM AS MEASURED BY THE 3-POINT GROUNDING TEST.
- THE TESTING FIRM SHALL INCLUDE THE FOLLOWING INFORMATION WITH THE REPORT:
- TESTING PROCEDURE INCLUDING THE MAKE AND MODEL OF TEST EQUIPMENT.
 - CERTIFICATION OF TESTING EQUIPMENT CALIBRATION WITHIN SIX (6) MONTHS OF DATE OF TESTING, INCLUDE CERTIFICATION LAB ADDRESS AND TELEPHONE NUMBER.
 - GRAPHICAL DESCRIPTION OF TESTING METHOD ACTUALLY IMPLEMENTED.
- B. THESE TESTS SHALL BE PERFORMED IN THE PRESENCE AND TO THE SATISFACTION OF VERIZON WIRELESS CONSTRUCTION REPRESENTATIVE. TESTING DATA SHALL BE INITIALED AND DATED BY THE CONSTRUCTION AND INCLUDED WITH THE WRITTEN REPORT/ANALYSIS.
- C. THE CONTRACTOR SHALL FORWARD SIX (6) COPIES OF THE INDEPENDENT ELECTRICAL TESTING FIRM REPORT/ANALYSIS TO ENGINEER A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO THE JOB TURNOVER.
- D. CONTRACTOR TO PROVIDE A MINIMUM OF ONE (1) WEEK NOTICE TO OWNER AND ENGINEER FOR ALL TESTS REQUIRING WITNESSING.
- SECTION 16961
- 1.01. TESTS BY CONTRACTOR
- A. ALL TESTS AS REQUIRED UPON COMPLETION OF WORK, SHALL BE MADE BY THIS CONTRACTOR. THESE SHALL BE CONTINUITY AND INSULATION TESTS; TEST TO DETERMINE THE QUALITY OF MATERIALS, ETC. AND SHALL BE MADE IN ACCORDANCE WITH NEC RECOMMENDATIONS. ALL FEEDERS AND BRANCH CIRCUIT WIRING (EXCEPT CLASS 2 SIGNAL CIRCUITS) MUST BE TESTED FREE FROM SHORT CIRCUIT AND GROUND FAULT CONDITIONS AT 500V IN A REASONABLY DRY AMBIENT OF APPROXIMATELY 70 DEGREES F.
- B. CONTRACTOR SHALL PERFORM LOAD PHASE BALANCING TESTS. CIRCUITS SHALL BE SO CONNECTED TO THE PANELBOARDS SUCH THAT THE NEW LOAD IS DISTRIBUTED AS EQUALLY AS POSSIBLE BETWEEN EACH LOAD AND NEUTRAL. 10% SHALL BE CONSIDERED AS A REASONABLE AND ACCEPTABLE ALLOWANCE. BRANCH CIRCUITS SHALL BE BALANCED ON THEIR OWN PANELBOARDS; FEEDER LOADS SHALL, IN TURN, BE BALANCED ON THE SERVICE EQUIPMENT. REASONABLE LOAD TEST SHALL BE ARRANGED TO VERIFY LOAD BALANCE IF REQUESTED BY THE ENGINEER.
- C. ALL TESTS, UPON REQUEST, BE REPEATED IN THE PRESENCE OF VERIZON WIRELESS REPRESENTATIVE. ALL TESTS SHALL BE DOCUMENTED AND TURNED OVER TO VERIZON WIRELESS SHALL HAVE THE AUTHORITY TO STOP ANY OF THE WORK NOT BEING PROPERLY INSTALLED. ALL SUCH DETECTED WORK SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER AND THE TESTS SHALL BE REPEATED.

REVISIONS		
00	08/19/05	BUILDING PERMIT

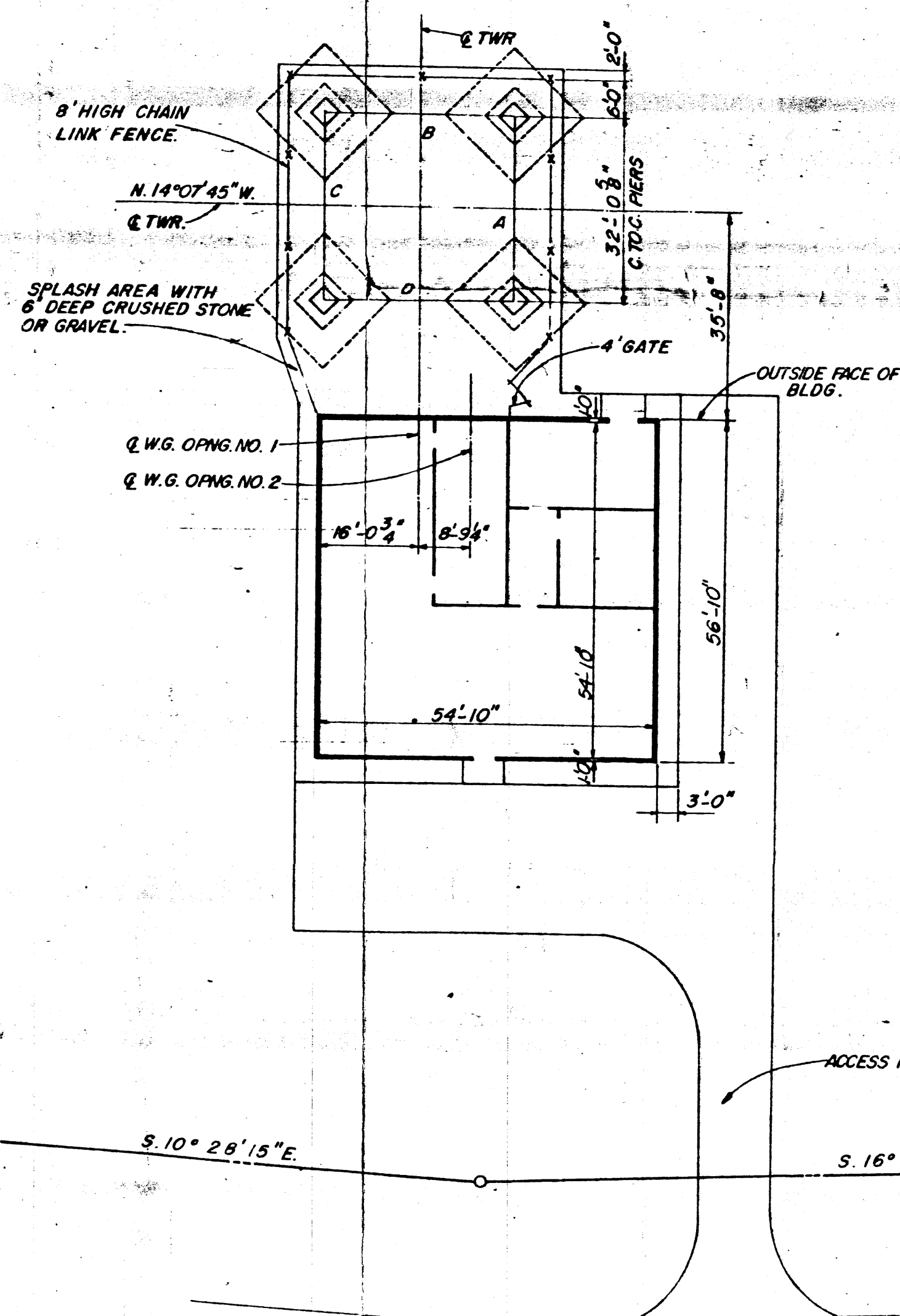


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DRAWN BY:	DMD
CHECKED BY:	FRC
SCALE:	AS NOTED
DATE:	08/19/05

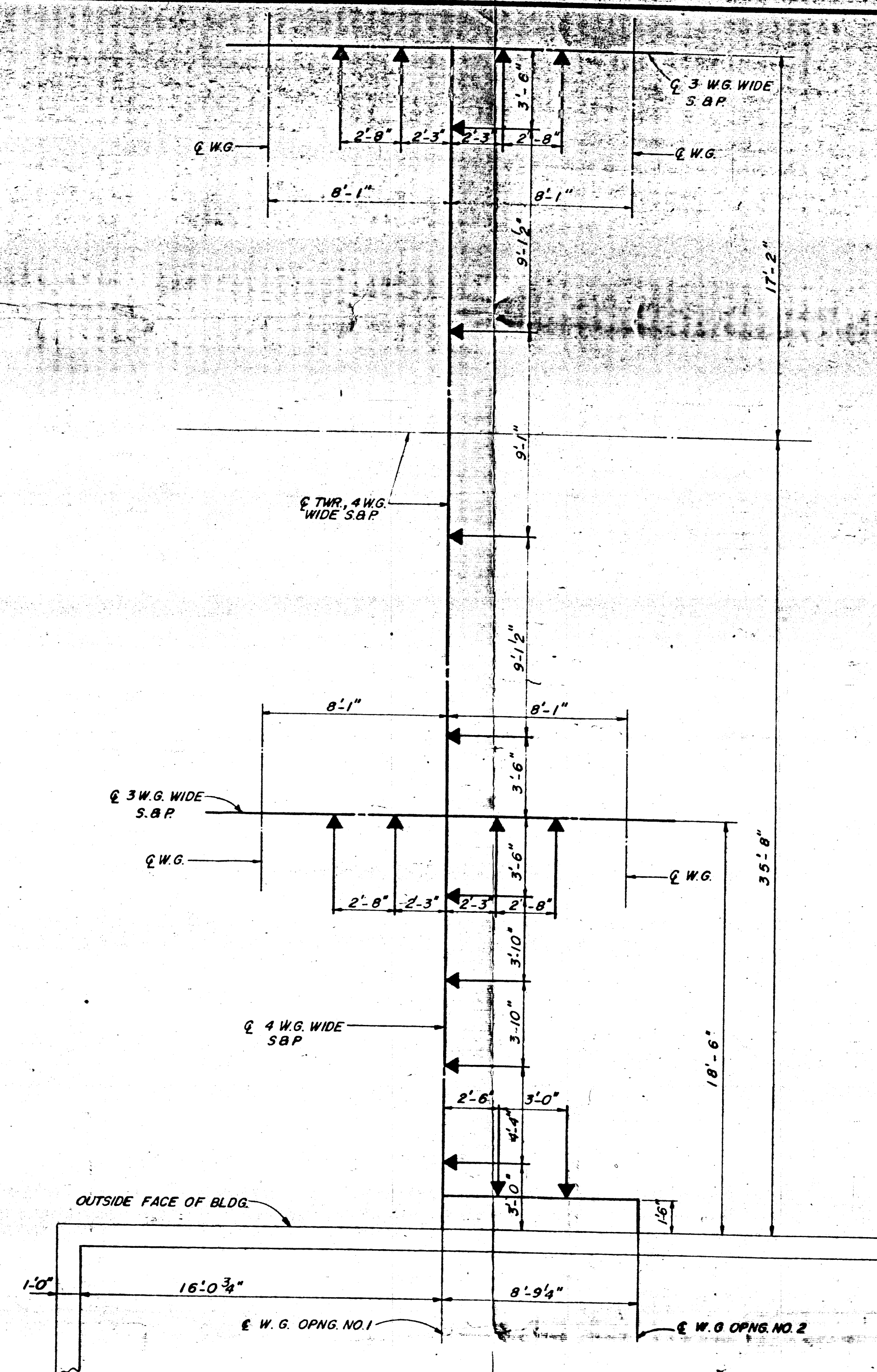




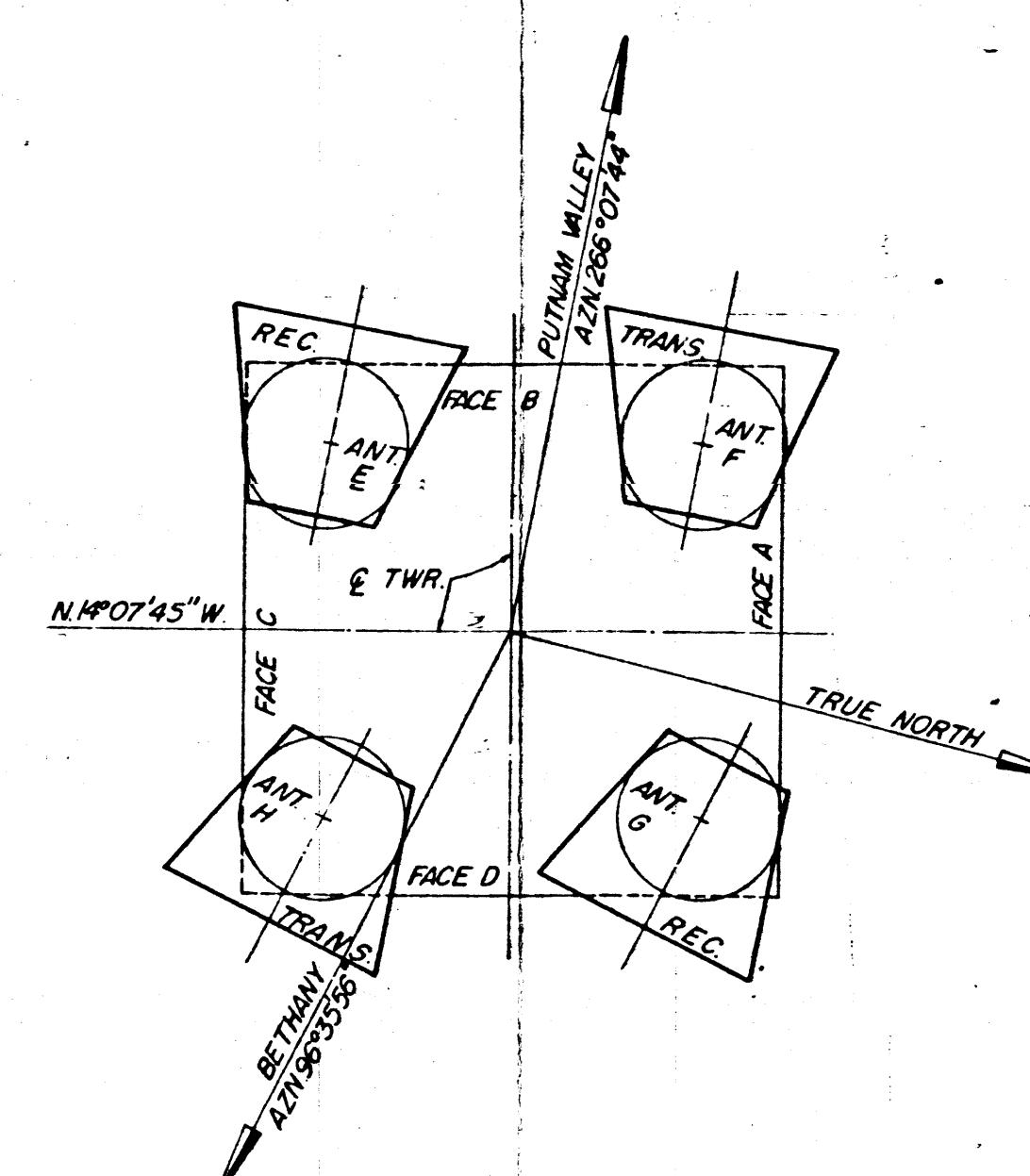
PLOT PLAN
SCALE: 50' = 1" - 0"



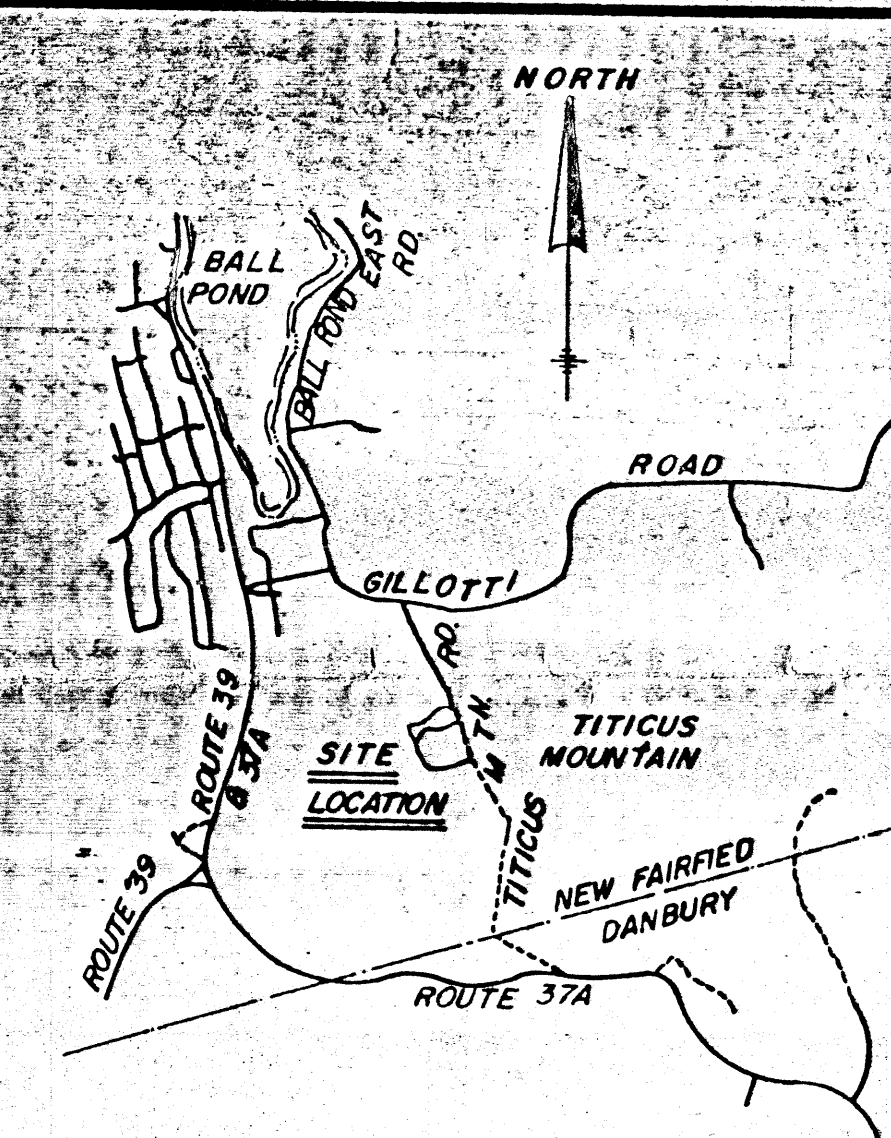
PART PLOT PLAN
SCALE: 1" = 20' - 0"



WAVEGUIDE RESTRAINER LOCATIONS
SCALE: 1/4" = 1' - 0"



ANTENNA PLATFORM
SCALE: 1/8" = 1' - 0"



LOCATION MAP
SCALE: 1" = 2,000'

NOTES:

- 187'-6" TYPE H TOWER.
- ALL BEARINGS AND AZIMUTHS BASED ON TRUE NORTH.
- ← DENOTES WAVEGUIDE RESTRAINERS.
- ANTENNAS E, F, G, H EQUIPPED WITH 2-1407A AND 2-1406A NETWORKS.
- ELEVATIONS:
FINISHED GRADE AT BLDG. 894'-0"
FINISHED GRADE AT TOWER 894'-0"
TOP OF TOWER PIERS 894'-6"
FINISHED FLOOR 895'-6"
- WAVEGUIDE OPENING NO. 1 FOR T.O. 2 PLATE WITH 12 HOLES AS PER DWG. EA 19643, 8'-0" ABOVE FIN. FL.
WAVEGUIDE OPENING NO. 2 FOR ONE TH PLATE WITH 8 HOLES AS PER DWG. SM 14316, 10'-4" ABOVE FIN. FL.
- TOWER FOUNDATIONS PER DWG. NA 26817-H 202A.
- TOWER LIGHTING AND PAINTING PER E.C.C. 17.25.
- BUILDING FLOOR PLAN IS PER DWG. NA 3J01.
- ACCESS ROAD IS PER DWG. EA 12610.
- MOUNTING AND PROTECTION FOR NETWORK ASSEMBLIES AS PER DWG. EA 19630. ANTENNA POSITIONS E, F, G, H.
- PROVIDE COMPLETE WAVEGUIDE SUPPORT & PROTECTION.
- WAVEGUIDE SUPPORT & PROTECTION AT BLDG. IS PER DWG. EA 19639, ISSUE 2.
- PROVIDE & INSTALL ALL WAVEGUIDE RESTRAINERS, BRACKETS & ASSOCIATED EQUIPMENT FOR ANTENNAS E, F, G, H.
- AREA WITHIN THE TOWER FENCE AND EXTENDING TWO FEET OUTSIDE THE FENCE, TO BE SURFACED WITH 6 INCHES OF CRUSHED STONE OR GRAVEL.
- REMOVE ALL TREES WITHIN 60 FEET OF TOWER OR BLDG.

187'-6" TYPE H TOWER

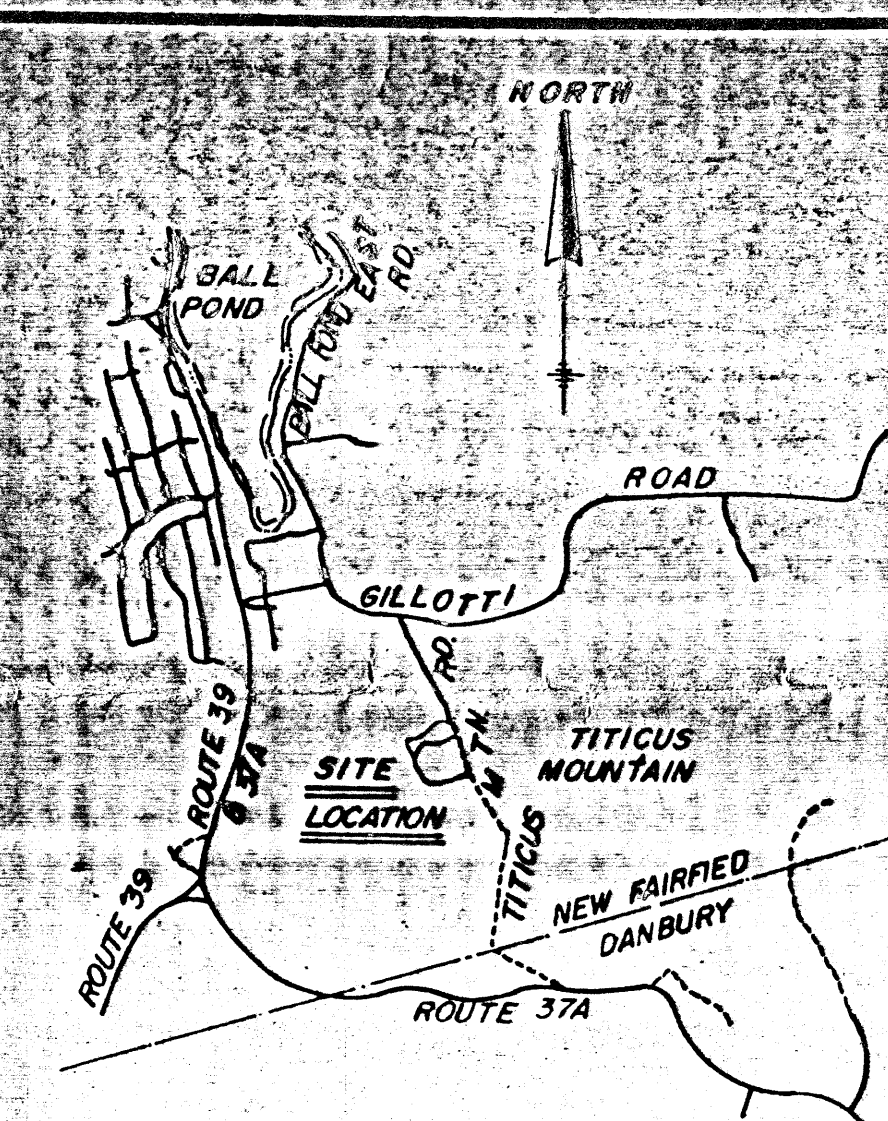
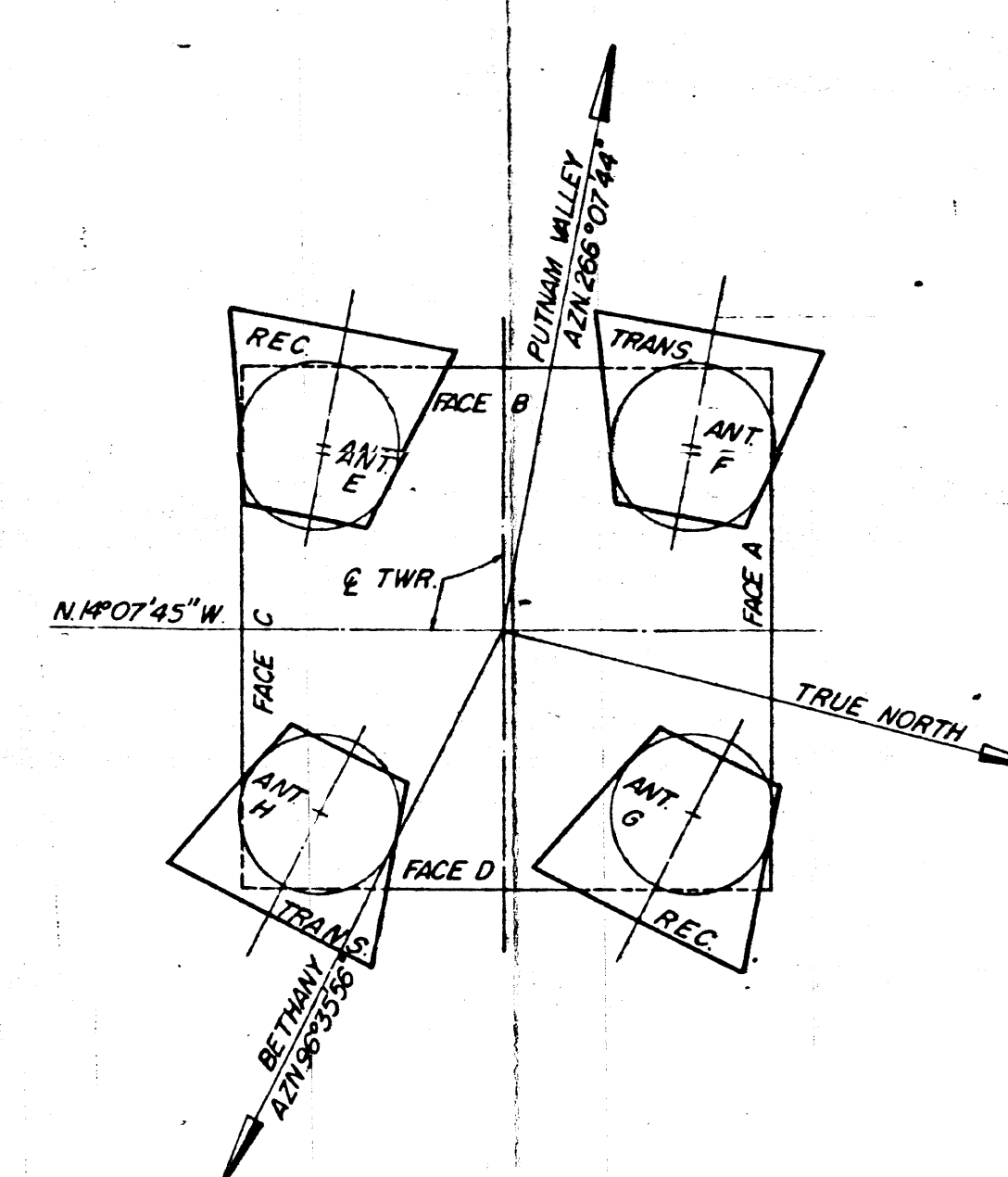
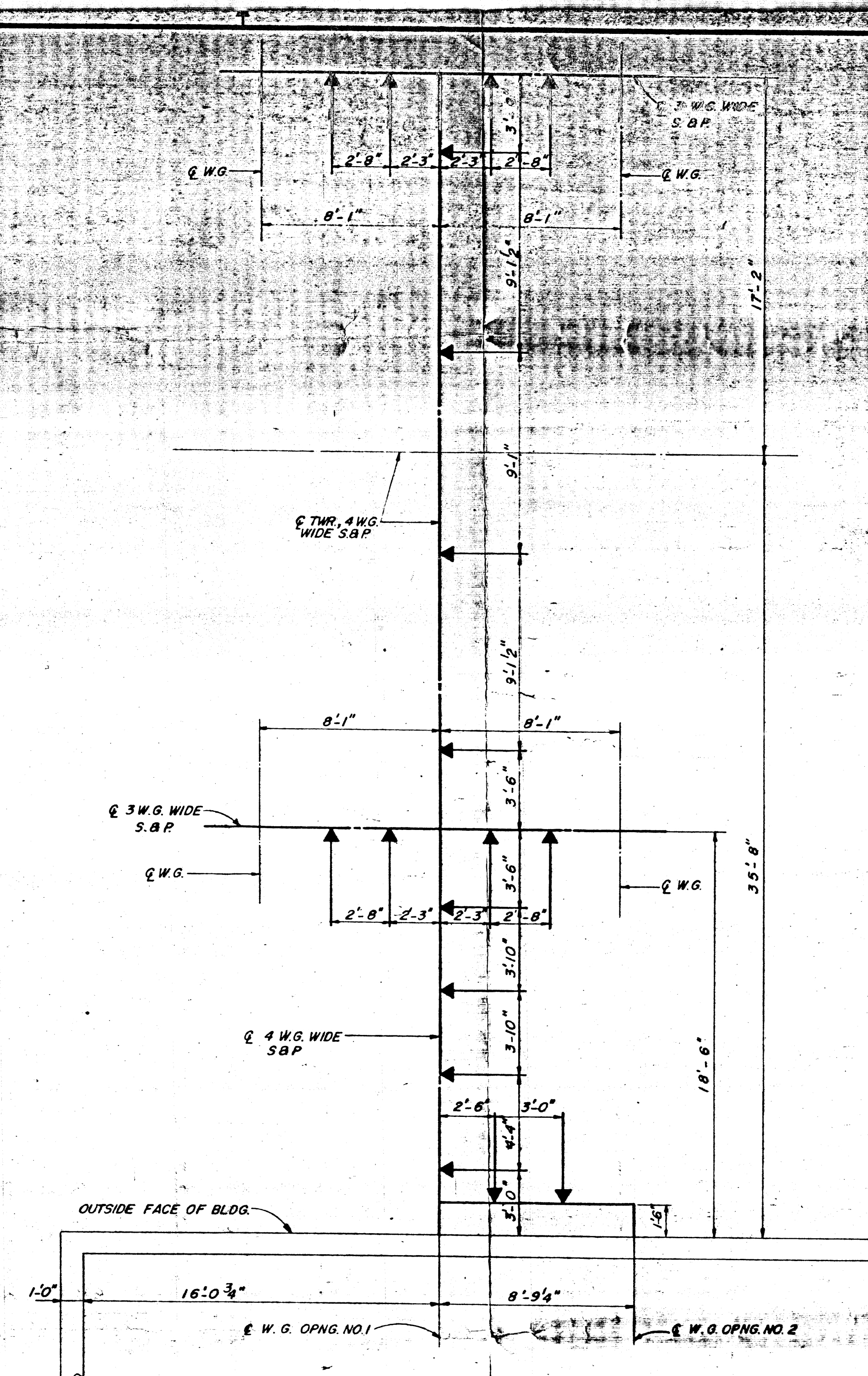
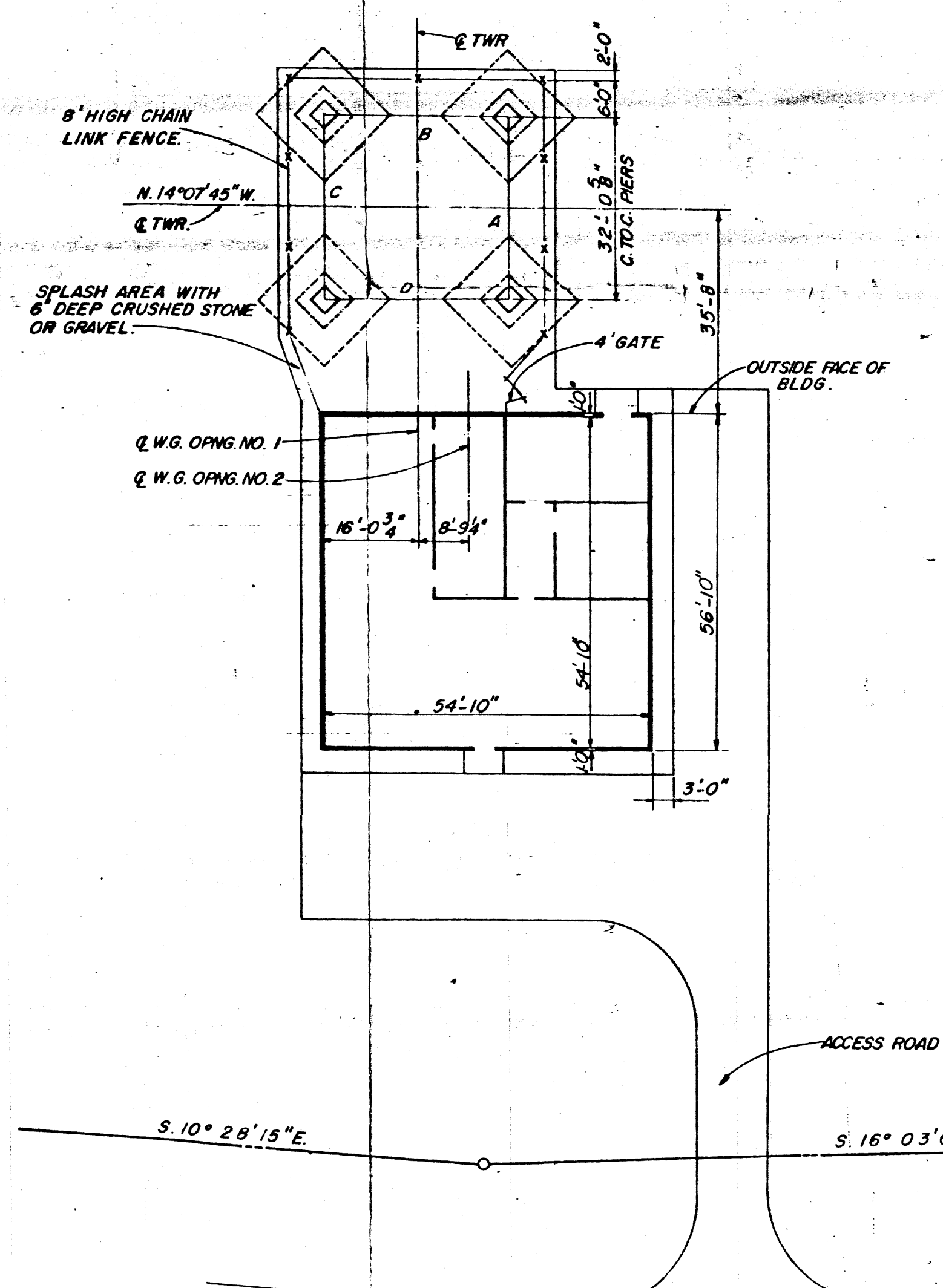
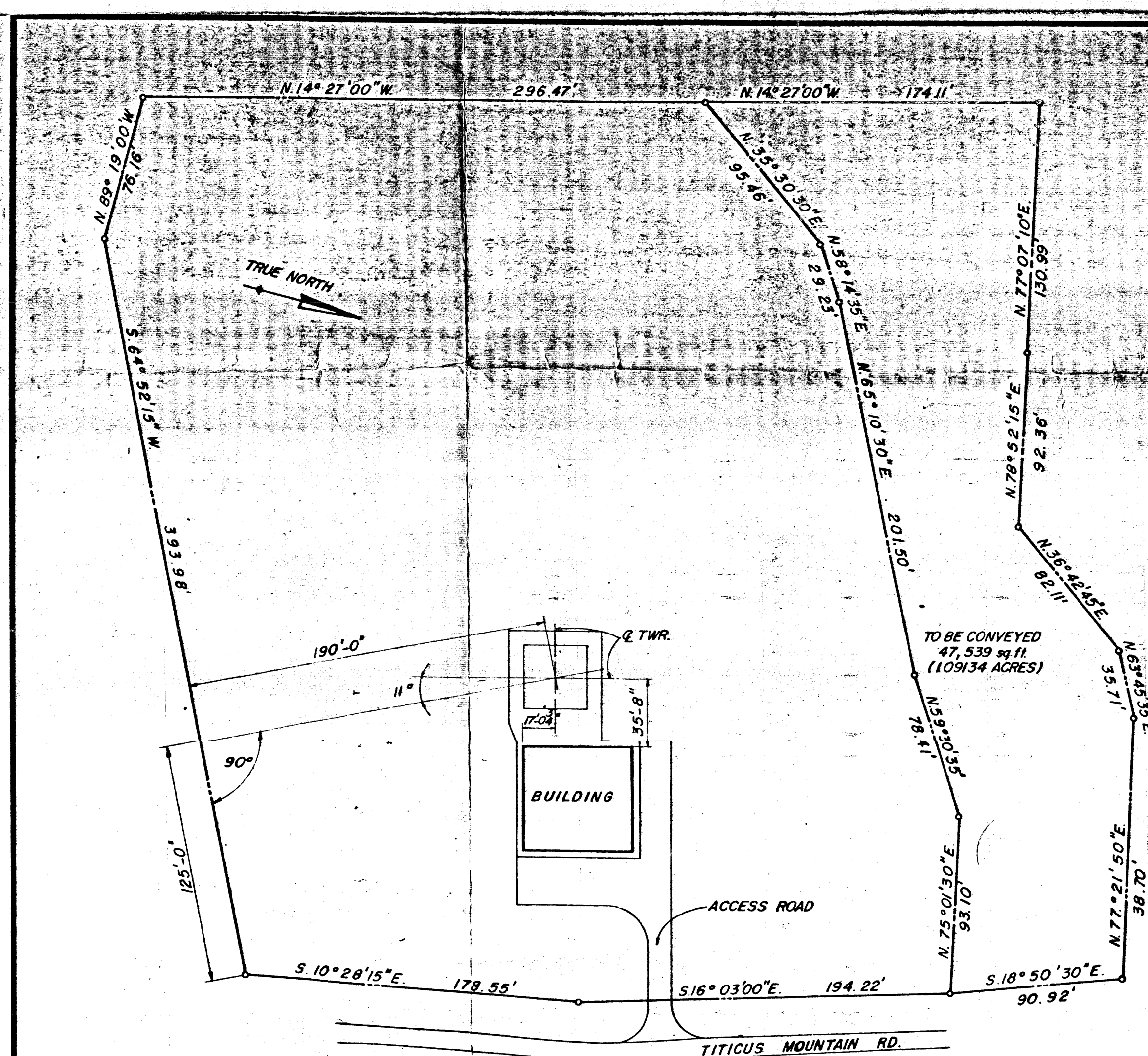
BLDG., TOWER, ANTENNAS & WAVEGUIDE INSTALLED UNDER EST. 59 6000

PLOT PLAN AND ANTENNA PLATFORM LAYOUT			
NEW FAIRFIELD, CONN.			
AREA 18155			
ROSE, CHULKOFF AND ROSE ENGINEERS			
10 COLUMBUS CIRCLE NEW YORK, N. Y.			
JOB NO.	DRAWN BY	CHECKED BY	DATE
C66203	J. P. V.	M. R.	MAY 25, 1966
AMERICAN TEL. AND TEL. CO. LONG LINES ENG. DEPT. NORTHEASTERN AREA			
NA-3J01-900			

NA-3J01-900

16 Titicus Mtn Road

27-2-7.3



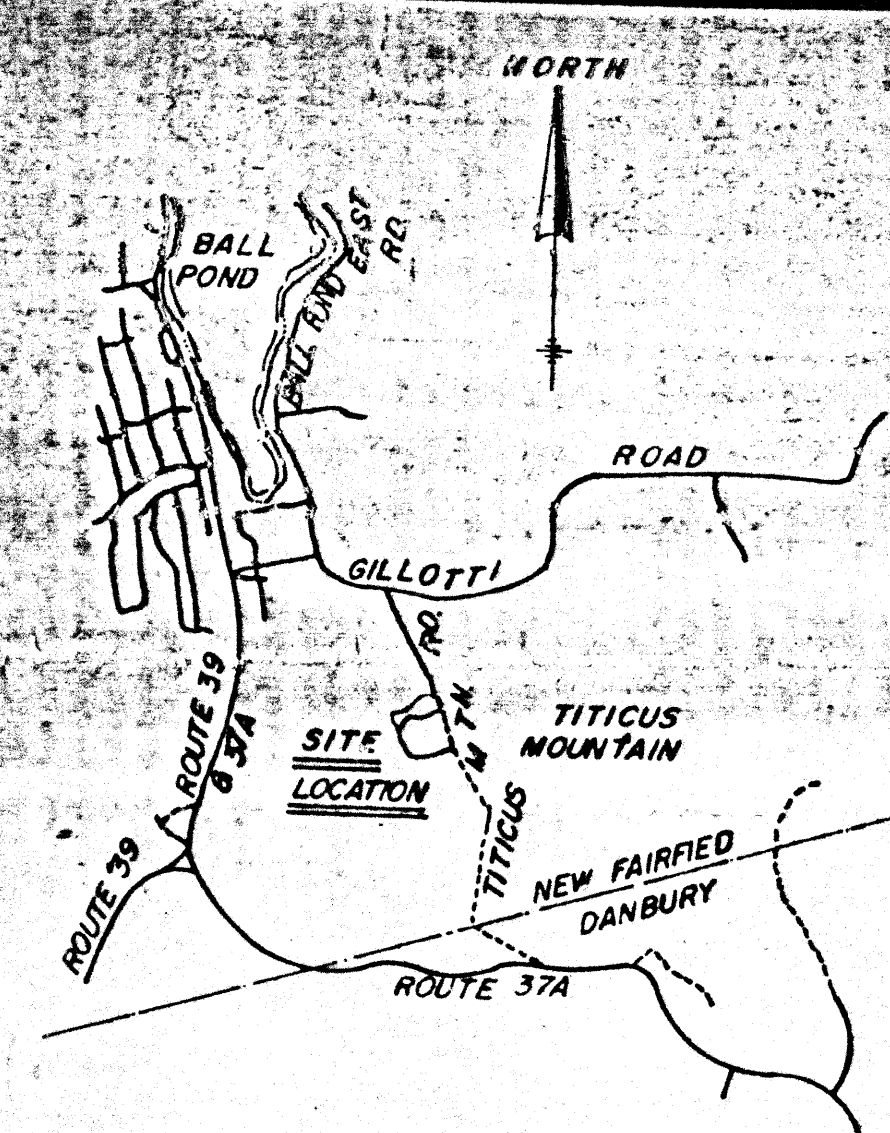
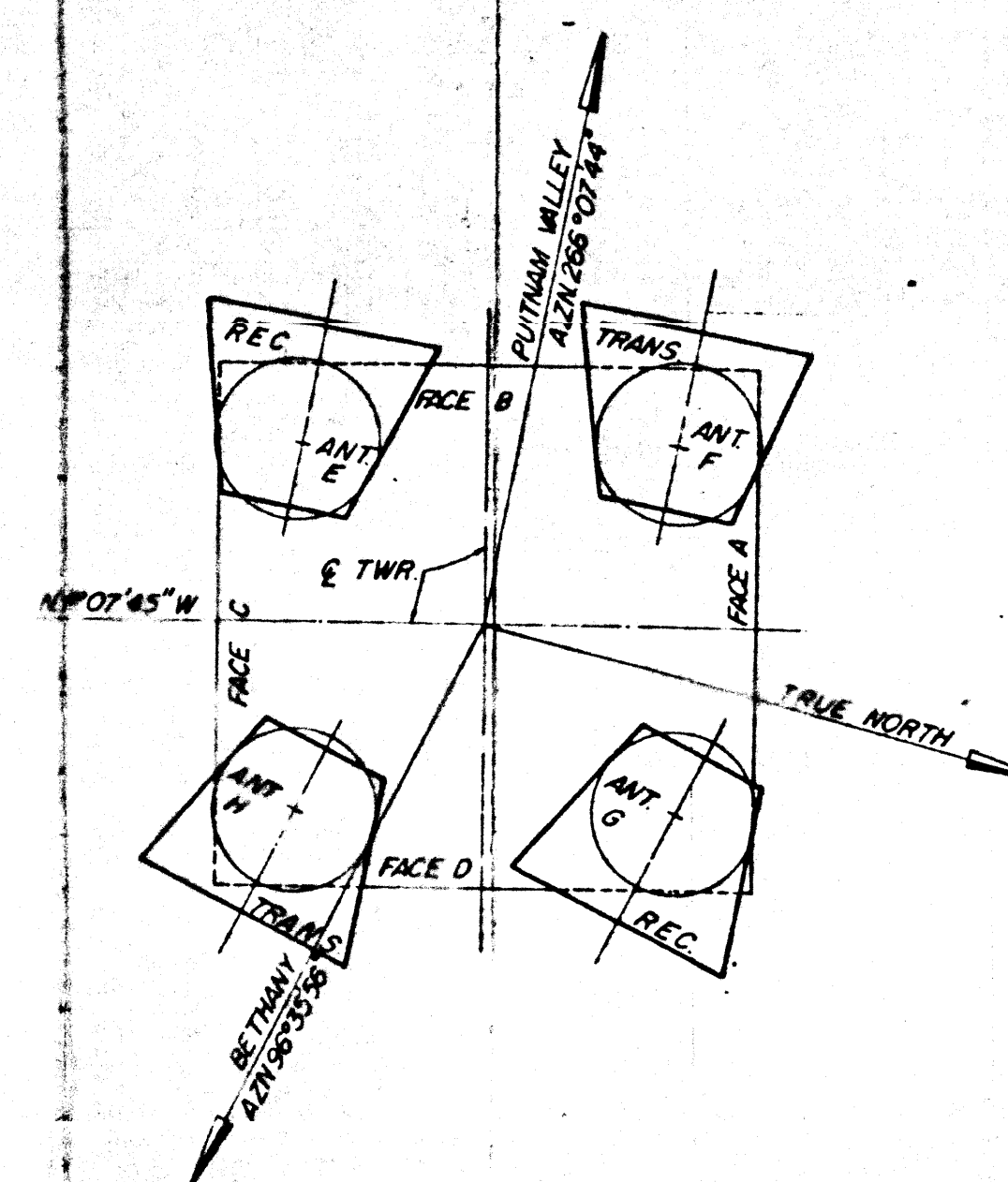
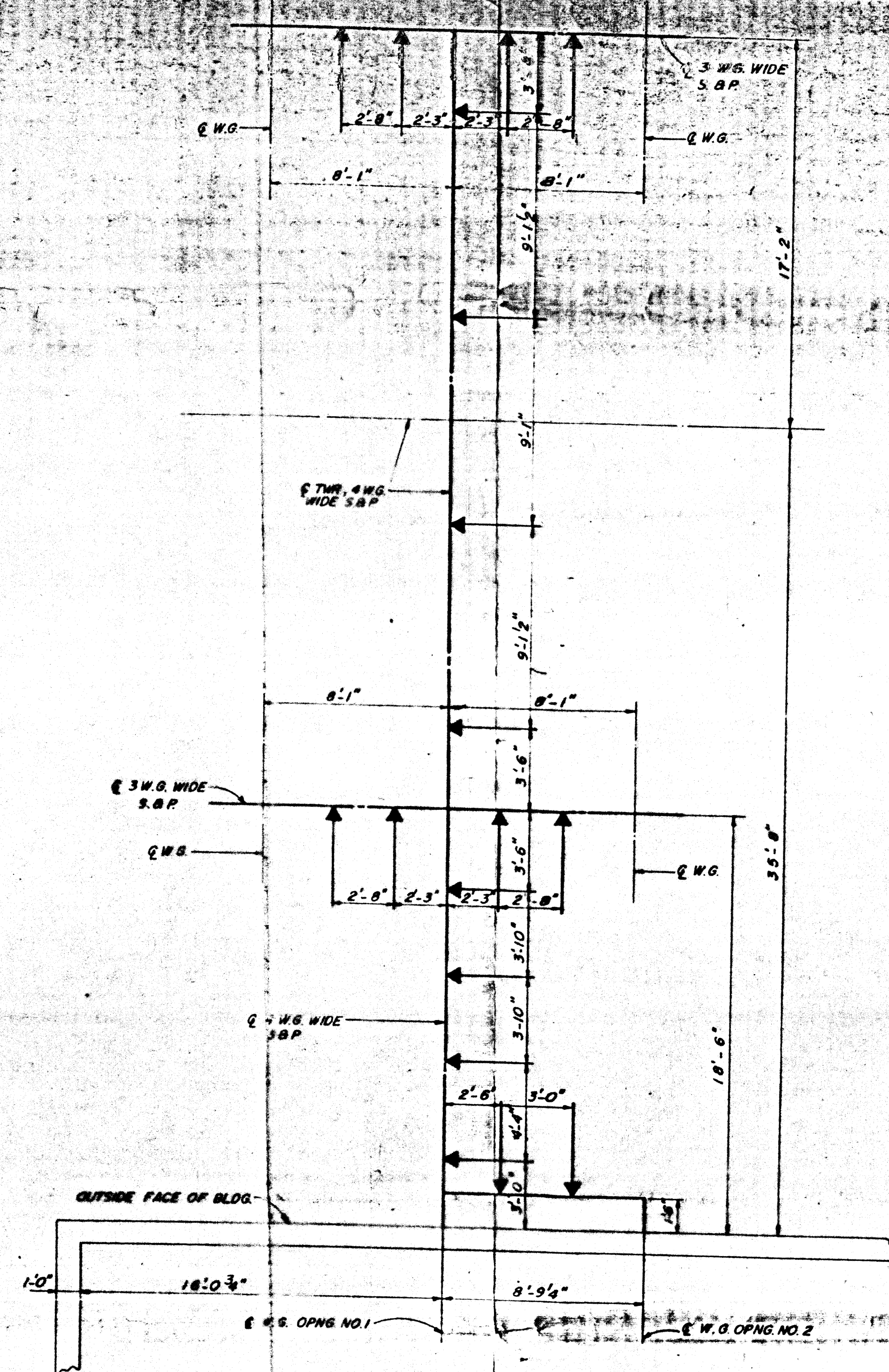
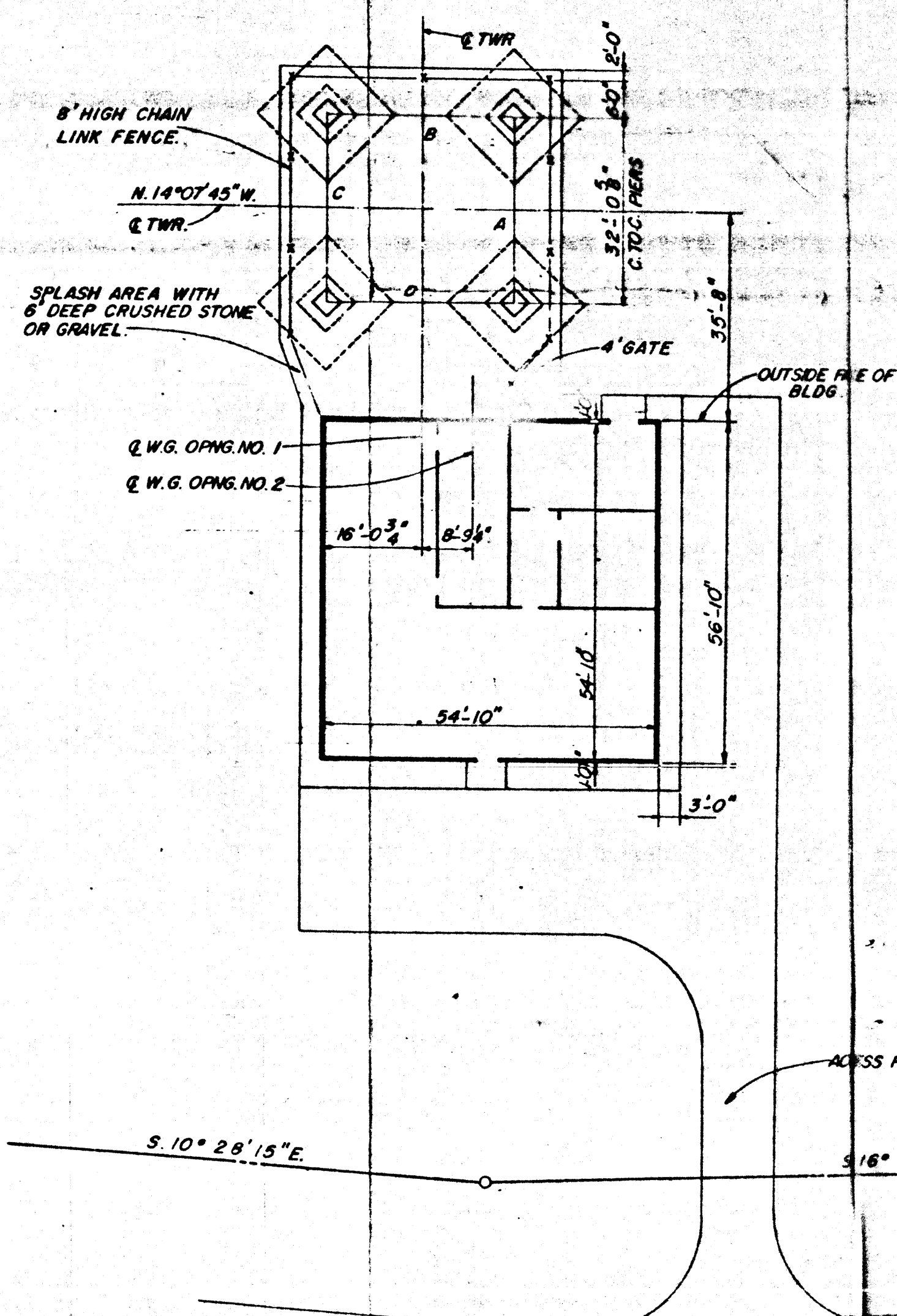
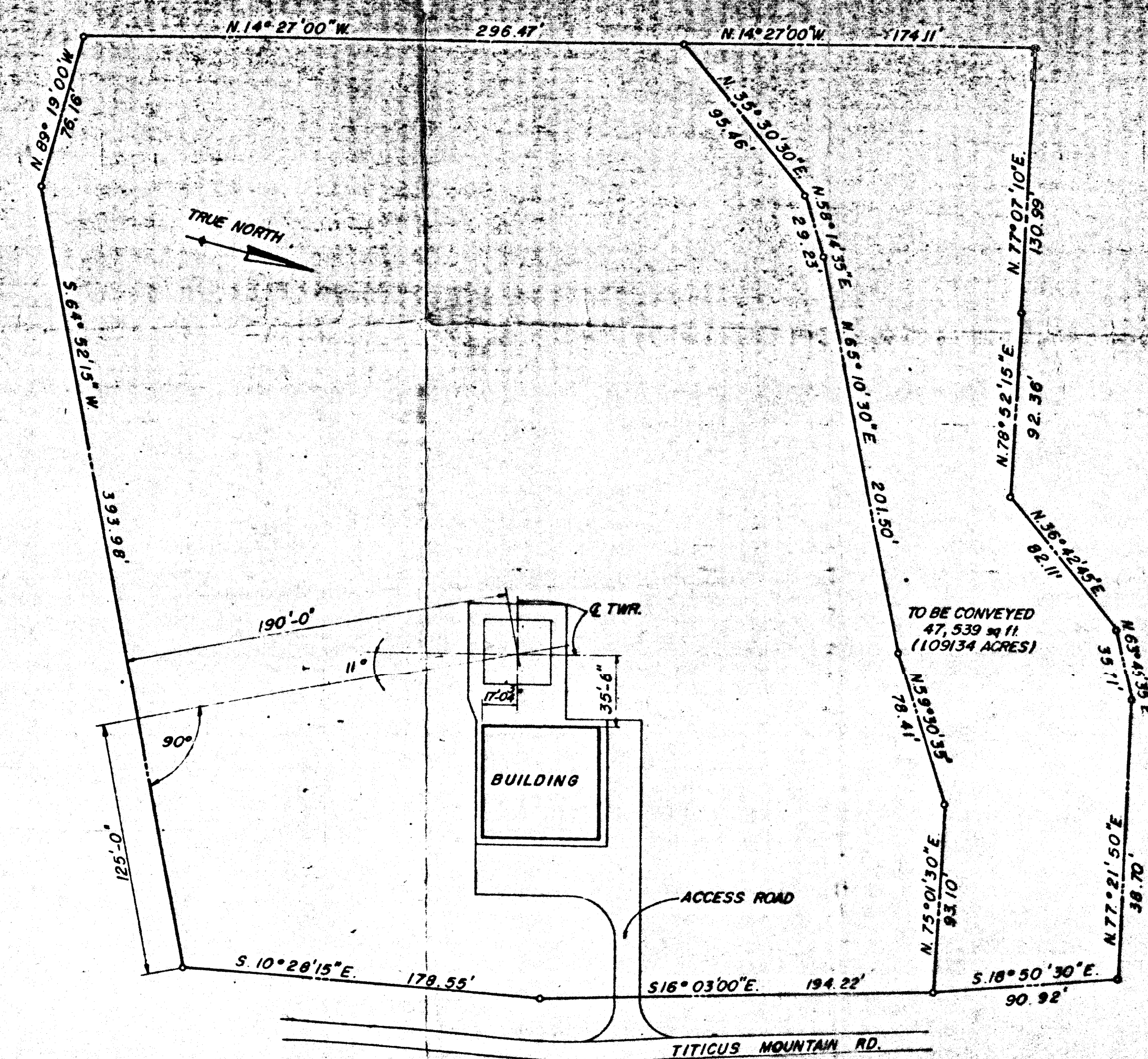
1. 197'-6" TYPE H TOWER.
2. ALL BEARINGS AND AZIMUTHS BASED ON TRUE NORTH
3. ← DENOTES WAVEGUIDE RESTRAINERS.
4. ANTENNAS E,F,G & H EQUIPPED WITH 2-1407A AND 2-1406A NETWORKS.
5. ELEVATIONS:
FINISHED GRADE AT BLDG. 894'-0"
FINISHED GRADE AT TOWER 894'-0"
TOP OF TOWER PIERS 894'-6"
FINISHED FLOOR 895'-6"
6. WAVE GUIDE OPENING NO.1 FOR TO 2 PLATE WITH 12 HOLES AS PER DWG. EA19643, Q 8"-8" ABOVE FIN FL. WAVE GUIDE OPENING NO.2 FOR ONE IN PLATE WITH 8 HOLES AS PER DWG. SM.14316, Q 10'-4" ABOVE FIN FL.
7. TOWER FOUNDATIONS PER DWG. NA.26917-H202A.
8. TOWER LIGHTING AND PAINTING PER FCC. 17.25.
9. BUILDING FLOOR PLAN IS PER DWG. NA.3301.
10. ACCESS ROAD IS PER DWG. EA12610.
11. MOUNTING AND PROTECTION FOR NETWORK ASSEMBLIES AS PER DWG. EA19630-ANTENNA POSITIONS E,F,G & H
12. PROVIDE COMPLETE WAVE GUIDE SUPPORT & PROTECTION
13. WAVE GUIDE SUPPORT PROTECTION AT BLDG. IS PER DWG. EA19633, ISSUE 2
14. PROVIDE & INSTALL ALL WAVE GUIDE RESTRAINERS, BRACKETS & ASSOCIATED EQUIPMENT FOR ANTENNAS E,F,G & H.
15. AREA WITHIN THE TOWER FENCE AND EXTENDING TWO FEET OUTSIDE THE FENCE, TO BE SURFACED WITH 6 INCHES OF CRUSHED STONE OR GRAVEL.
16. REMOVE ALL TREES WITHIN 60 FEET OF TOWER OR BLDG.


187-'6" TYPE 'H' TOWER

BLDG., TOWER, ANTENNAS & WAVEGUIDE INSTALLED
UNDER EST. 5 G 8000.

PLOT PLAN AND ANTENNA PLATFORM LAYOUT			
AREA 16135		NEW FAIRFIELD, CONN.	
ROSE, CHULKOFF AND ROSE, ENGINEERS 10 COLUMBUS CIRCLE NEW YORK, N. Y.			
JOB NO.	DRAWN BY	CHECKED BY	DATE
C62603	J.P.V.	M.R.	MAY 25, 1966
AMERICAN TEL. AND TEL. CO. LONG DISTANCE ENG. DEPT. NORTHEAST AREA			NA-3J01-900

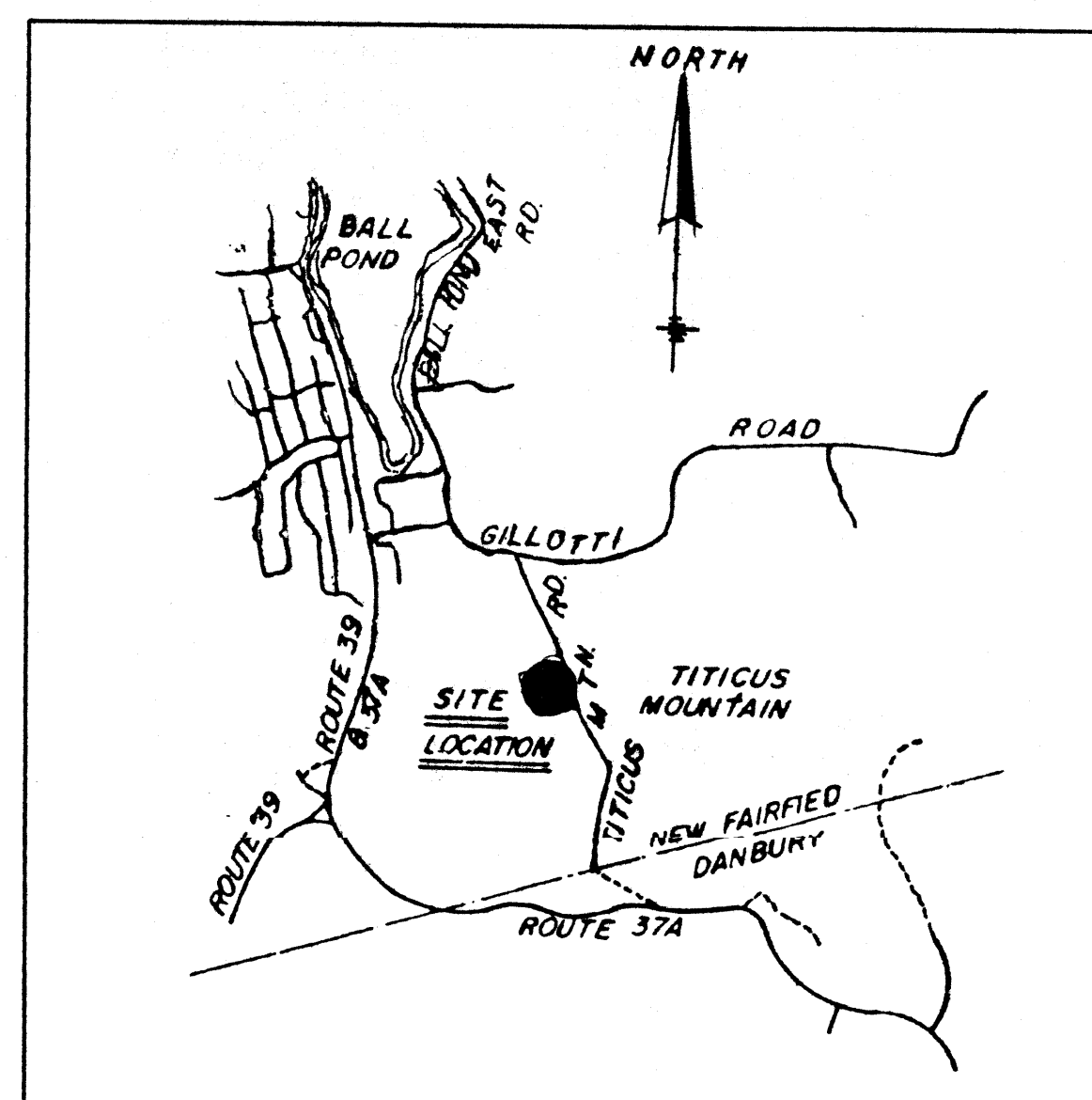
16 TITICUS MTN. ROAD
27-2-7.3



1. 187°5' TYPE H TOWER.
2. ALL BEARINGS AND AZIMUTHS BASED ON TRUE NORTH
3.  DENOTES WAVEGUIDE RESTRAINERS.
4. ANTENNAS E,F,G,H EQUIPPED WITH 2-1407A AND 2-1406A NETWORKS.
5. ELEVATIONS:
FINISHED GRADE AT BLDG. 894'-0"
FINISHED GRADE AT TOWER 894'-0"
TOP OF TOWER PIERS 894'-6"
FINISHED FLOOR 895'-6"
6. WAVE GUIDE OPENING NO.1 FOR TO-2 PLATE WITH 12 HOLES AS PER DWG EA19643, @ 8'-8" ABOVE FIN FL.
WAVE GUIDE OPENING NO.2 FOR ONE T PLATE WITH 8 HOLES AS PER DWG. SW.14316, @ 10'-4" ABOVE FIN FL.
7. TOWER FOUNDATIONS PER DWG. NA.26817-H202A.
8. TOWER LIGHTING AND PAINTING PER FCC. 17.23.
9. BUILDING FLOOR PLAN IS PER DWG. NA.3430H.
10. ACCESS ROAD IS PER DWG. EA.12610.
11. MOUNTING AND PROTECTION FOR NETWORK ASSEMBLIES AS PER DWG. EA.19630. ANTENNA POSITIONS E,F,G,H K
12. PROVIDE COMPLETE WAVE GUIDE SUPPORT & PROTECTION
13. WAVE GUIDE SUPPORT & PROTECTION AT BLDG. IS PER DWG. EA.19639, ISSUE 2
14. PROVIDE & INSTALL ALL WAVE GUIDE RESTRAINERS, BRACKETS & ASSOCIATED EQUIPMENT FOR ANTENNAS E,F,G,H K.
15. AREA WITHIN THE TOWER FENCE AND EXTENDING TWO FEET OUTSIDE THE FENCE TO BE SURFACED WITH 6 INCHES OF CRUSHED STONE OR GRAVEL.
16. REMOVE ALL TREES WITHIN 60 FEET OF TOWER OR BLDG.

PLOT PLAN AND ANTENNA PLATFORM LAYOUT			
AREA 14135		NEW FAIRFIELD, CONN.	
ROSE, CHULKOFF AND ROSE ENGINEERS 10 COLUMBUS CIRCLE NEW YORK, N. Y.			
JOB NO. C 6203	DRAWN BY J. P. V.	CHECKED BY M. R.	DATE MAY 25, 1966
AMERICAN TEL. AND TEL. CO. LONG LINES ENG. DEPT. NORTHEASTERN AREA			NA-3J01-900

VICINITY MAP



SITE MAP

NEXTEL COMMUNICATIONS

One North Broadway, 2nd Floor
White Plains, NY 10601

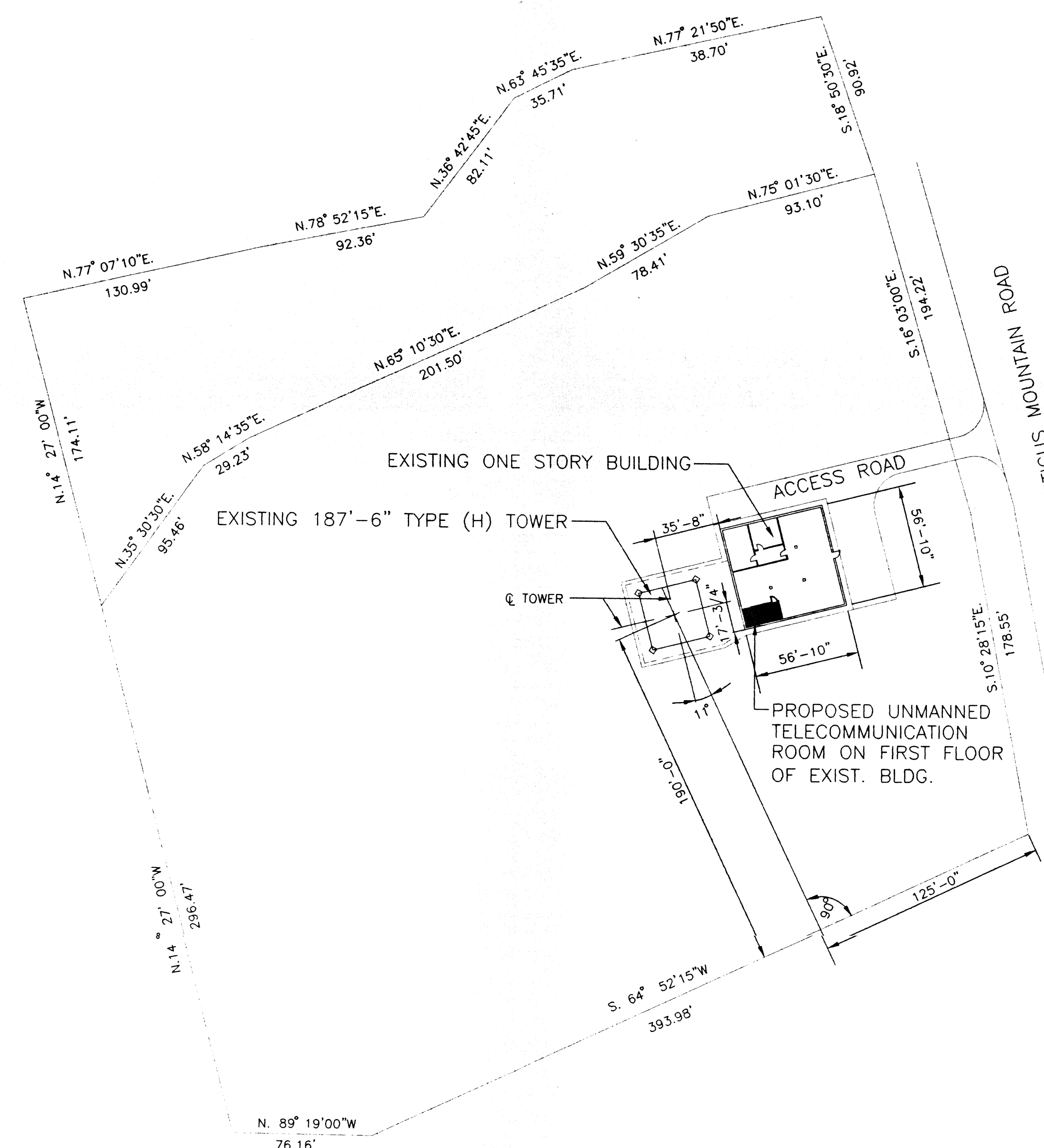
UNMANNED WIRELESS COMMUNICATIONS SITE

Site No. CT-0066 — NEW FAIRFIELD

16 TITICUS MOUNTAIN ROAD, NEW FAIRFIELD, CT

SITE LOCATION PLAN

SCALE: 1" = 50'-0"



ZONING 4/19/97
EROSION 5-23-97
SANITARIAN 5/30/97
PUBLIC WORKS 5/30/97
FIRE MARSHAL 5/30/97
BUILDING OFF. 5/30/97

SITE INFORMATION/CODE ANALYSIS

LATITUDE: 73° 30' 56"
LONGITUDE: 41° 27' 04"

TOWN OF NEW FAIRFIELD
BLOCK: 2
LOT: 7.3
ZONE: R-88
LOCATION: 16 TITICUS MOUNTAIN ROAD
NEW FAIRFIELD CT

OWNER: AT&T
268 WOLCOTT RD.
WOLCOTT, CT. 06716
ATTN: MR. THOMAS C. FORD

HEIGHT OF EXISTING BUILDING: 1 STORY
EXISTING BUILDING FOOTPRINT: APPROX. 3230 SQ.FT.
EX. BLDG. OCCUPANCY GROUP: B (BUSINESS),
TELEPHONE EQUIPMENT SHELTER
EX. BLDG. CONSTRUCTION CLASSIFICATION: 1A
BUILDING IS NOT SPRINKLERED

PROPOSED CELL SITE OCCUPANCY GROUP: B
ASSUMED CONSTRUCTION CLASSIFICATION: 2C
2HR FIRE SEPARATION BETWEEN NEXTEL EQUIPMENT ROOM
AND REMAINING AREA OF BUILDING
AREA OF NEW WIRELESS COMMUNICATION ROOM: 200 SQ. FT.
NEW WIRELESS COMMUNICATION ROOM TO BE UNOCCUPIED
LOCATION OF NEW WIRELESS COMM. ROOM: GRADE LEVEL

LIST OF DRAWINGS

DRAWING No.	DESCRIPTION
T-1	COVER SHEET
A-1	PLANS AND DETAILS
A-2	ELEVATION AND DETAILS
A-3	GENERAL NOTES & SPECIFICATIONS
E-1	FLOOR, REFLECTED CEILING AND GROUNDING PLANS & DETAILS
E-2	LIGHTING PLAN, PANELBOARD SCHEDULES AND GENERAL NOTES, MECHANICAL LAYOUT & SPECIFICATIONS

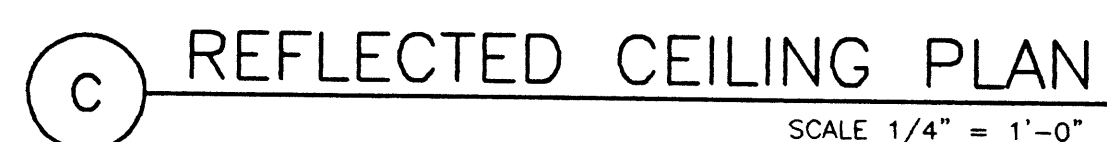
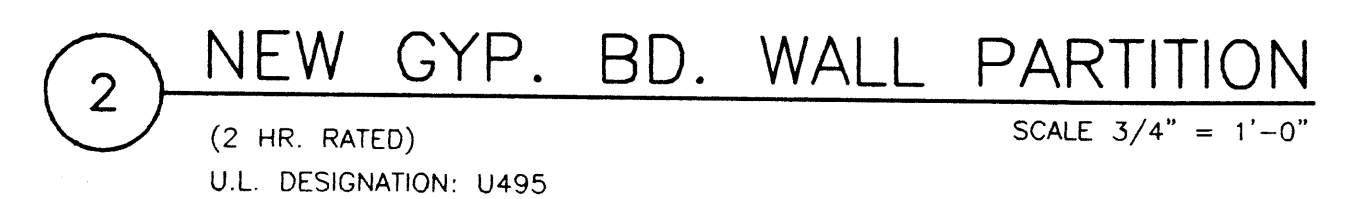
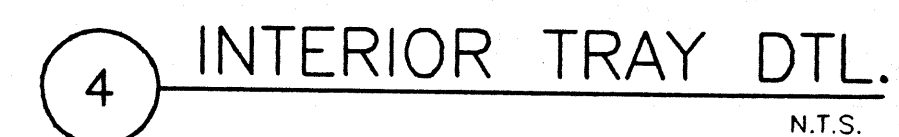
1	ISSUED FOR CLIENT REVIEW	TJA	15 APR 97
REV	REVISION DESCRIPTION	BY	DATE

EI ASSOCIATES ARCHITECTURE • ENGINEERING • CONSTRUCTION 115 Evergreen Pl. • E. Orange, NJ 07018 • (201) 672-5100	<i>[Signature]</i>
-------------------------------------------------------------------------------------------------------------------------------	--------------------

GAETANO P. CIPRIANO	PROFESSIONAL ENGINEER CT. LICENSE NO. 15383	ARCHITECTURAL CLIENT DWG. NO.
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SCALE AS NOTED	PROJECT NEXTEL COMMUNICATIONS SITE # CT-0066 16 TITICUS MOUNTAIN ROAD NEW FAIRFIELD, CT	EIA PROJECT NO. EE4444 EIA DRAWING NO. T-1
DRAWN BY: <u>[Signature]</u>		
DESIGNED BY: <u>[Signature]</u>		
CHECKED BY: <u>[Signature]</u>		
APPROVED BY: <u>[Signature]</u>		
PROJECT MANAGER: <u>[Signature]</u>		
	TITLE COVER SHEET	ISSUE DATE 15 APR 97 REVISION

FILE COPY
received
5/30/97
97-190




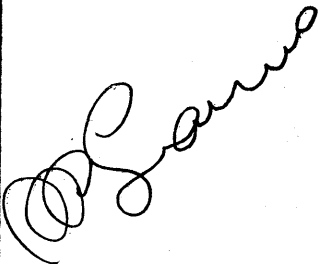





1		ISSUED FOR CLIENT REVIEW		TJA 15 APR 97	
REV		REVISION DESCRIPTION		BY DATE	
		EI ASSOCIATES ARCHITECTURE • ENGINEERING • CONSTRUCTION 115 Evergreen Pl. • E. Orange, NJ 07018 • (201) 672-5100			
GAETANO P. CIPRIANO		PROFESSIONAL ENGINEER CT. LICENSE NO. 15383		ARCHITECTURAL	
				CLIENT DWG. NO. -----	
SCALE AS NOTED		PROJECT NEXTEL COMMUNICATIONS		EIA PROJECT NO. EE4444	
DRAWN BY:  LK APR 97		SITE # CT-0066		EIA DRAWING NO.	
DESIGNED BY:  TJA APR 97		16 TITICUS MOUNTAIN ROAD		A-1	
CHECKED BY: 		NEW FAIRFIELD, CT			
APPROVED BY: 		TITLE		ISSUE DATE 15 APR 97	
PROJECT MANAGER: 		PLANS & DETAILS		REVISION —	

Diagram showing the proposed Nextel Omni Antennas (3 total) and the bottom of the proposed Nextel Omni Antennas (3 total) relative to the existing structure.

EXISTING TYPE (H) LATTICE TOWER

EXISTING BRIDGE
NEW ICEBRIDGE

— EXISTING 1 STORY CONCRETE STRUCTURE

SOUTH ELEVATION

SCALE 1/16" = 1'-0"

12" WAVEGUIDE CHANNEL

— MICROFLECT PIPE HEAD,
MODEL NO.8509

— 3 1/2" O.D.SCHED.40, HOT DIPPED GALVANIZED PIPE COLUMN, 8' O.C.

12" WAVEGUIDE CHANNEL —

MICROFLECT COAX HANGER —
SUPPORT RODS AND CUSHIONS.

- MICROFLECT PIPE HEAD,
MODEL NO.B509

- 3 1/2" O.D.SCHED.40, HOT DIPPED GALVANIZED PIPE COLUMN,8' O.C.



—POST SLEEVE WITH 12"ØX3/8"
THICK BASE PLAT WELDED

- 3/4" DIAMETER ANCHOR BOLTS

— CONCRETE COLUMN FOOTING

2 SECTION

SCALE 3/4" = 1'-0"

1	ISSUED FOR CLIENT REVIEW	TJA	15 APR 97
REV	REVISION DESCRIPTION	BY	DATE
 EI ASSOCIATES ARCHITECTURE • ENGINEERING • CONSTRUCTION 115 Evergreen Pl. • E. Orange, NJ 07018 • (201) 672-5100			
GAIETANO P. CIPRIANO		ARCHITECTURAL	
		CLIENT DWG. NO.	

PROJECT		EIA PROJECT NO.	
NEXTEL COMMUNICATIONS		EE4444	
SITE # CT-0066		EIA DRAWING NO.	
16 TITICUS MOUNTAIN ROAD		A-2	
NEW FAIRFIELD, CT			
TITLE		ISSUE DATE	
ELEVATION AND DETAILS		15 APR 97	
		REVISION	

ARCHITECTURAL

01000 - GENERAL NOTES

- ALL WORK SHALL COMPLY WITH RULES AND REGULATIONS OF ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION.
- ALL DIMENSIONS SHALL BE VERIFIED AT THE JOB BY THE CONTRACTOR AND EACH SUB-CONTRACTOR. OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
- PATCH ALL EXISTING WORK, TO REMAIN, TO MATCH ADJACENT CONDITIONS WHERE REQUIRED DUE TO DEMOLITION WORK.
- IN GENERAL, MATERIALS AND MATERIALS FOR REPAIR CONDITIONS SHALL MATCH SIMILAR ITEMS IN QUALITY, DETAIL, PROFILE AND FINISH AS THOSE ALREADY BUILT INTO WORK.
- CONTRACTOR SHALL REFER QUESTIONS ON MATERIALS, FINISHES, LABOR AND/OR PERFORMANCE STANDARDS NOT SPECIFIED HEREIN TO NEXTEL.
- DAMAGED UTILITIES AND IMPROVEMENTS SHALL BE REPAIRED WITH NO ADDITIONAL COST TO OWNER AND TO NEXTEL'S SATISFACTION.
- ALL CONTRACTORS TO PROVIDE ALL SAFETY MEASURES REQUIRED TO PROVIDE A SECURE SITE DURING CONSTRUCTION. ALL REQUIRED EXITS MUST BE PROTECTED FOR LIFE AND PROPERTY ARE TO BE MAINTAINED.
- REFER TO SPECIFICATION FOR ADDITIONAL INFORMATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITH ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID.
- CONTRACTOR SHALL COORDINATE HIS WORK WITH NEXTEL SO THAT THERE IS NO INTERFERENCE WITH OWNER'S PERSONNEL OR WORK SCHEDULE.
- ANY CONFLICTS WITH NEW CONSTRUCTION AND EXISTING CONDITIONS OR EQUIPMENT, ETC. ARE TO BE BROUGHT TO THE ATTENTION OF NEXTEL PRIOR TO PROCEEDING WITH THE WORK.

02110 - GENERAL DEMOLITION NOTES

- PROVIDE ALL NECESSARY DEMOLITION FOR ALTERATION AS INDICATED ON THIS AND OTHER APPLICABLE DRAWINGS, AND AS MAY OTHERWISE BE NEEDED.
- PROVIDE AND MAINTAIN ALL TEMPORARY BRACING REQUIRED TO AVOID COLLAPSE AND PREVENT DAMAGE DURING CONSTRUCTION.
- COORDINATE ALL DEMOLITION AND CONSTRUCTION WORK WITH OTHER TRADES.
- CONTRACTOR SHALL PROTECT ALL EXISTING ROOMS AND WORK AREA FROM CONSTRUCTION DIRT AND DUST, WATER AND ALL OTHER TYPES OF DAMAGES DUE TO DEMOLITION AND CONSTRUCTION PROCESSES.
- EXISTING DOORS AND CABINETS WHICH ARE TO BE REMOVED ARE TO BE TAKEN TO THE STORAGE UNIT AS DIRECTED BY THE OWNER.

02115 - CUTTING AND PATCHING

- GENERAL
 - DOCUMENTS

WORK INCLUDED UNDER THIS SECTION IS SUBJECT TO THE AGREEMENT, GENERAL CONDITIONS AND CONTRACT DRAWINGS, ALL OF WHICH ARE HEREBY MADE A PART OF THIS SECTION.
 - SCOPE

PROVIDE ALL MATERIALS, LABOR AND SUPERVISION, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE WORK OF THIS SECTION INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:
 - MASONRY
 - WORK AS INDICATED ON THE DRAWINGS & SPECIFICATIONS.

- MATERIALS
 - MATERIALS FOR REPLACEMENT, REPAIRING, PATCHING, RESTORATION, & SIMILAR WORK SHALL CONFORM TO THE SPECIFICATIONS FOR NEW MATERIALS OR WORK. WHERE MATERIALS AND/OR INSTALLATIONS ARE NOT COVERED BY THE SPECIFICATIONS, SUCH MATERIALS SHALL MATCH EXISTING TO THE MAXIMUM EXTENT POSSIBLE. ALL EXCESS MATERIALS RESULTING FROM CUTTING & REMOVAL WORK SHALL BE REMOVED FROM THE JOB SITE IN AN APPROVED MANNER.

- EXECUTION
 - PREPARATION

PRIOR TO CUTTING OR UNCOVERING WORK, PROVIDE ALL SHORING, BRACING & SUPPORTS AS REQUIRED TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE PROJECT. PRIOR TO RESTORING WORK, PROPERLY PREPARE EXISTING SURFACES TO RECEIVE NEW MATERIALS SUCH AS TO PROVIDE A PROPER BOND OR JOINING. TEMPORARY PROTECTION FROM WIND AND STORM DAMAGE SHALL BE PROVIDED WHENEVER OPENINGS ARE CUT IN EXTERIOR OF BUILDING.
 - CUTTING AND DRILLING

CONTRACTOR SHALL REMOVE ALL MATERIAL DESIGNATED FOR REMOVAL AS NECESSARY FOR INSTALLATION OF THE NEW WORK. CUTTING SHALL BE PERFORMED BY HAND OR SMALL POWER TOOLS; HOLES AND SLOTS CUT NEAT AND TO SIZE REQUIRED, WITH MINIMUM DISTURBANCE OF ADJACENT WORK. OPENINGS SHALL BE COVERED TEMPORARILY WHEN NOT IN USE AND PATCHED AS SOON AS WORK IS INSTALLED. THE USE OF GAS FRIED, AND OR DIESEL EQUIPMENT WILL NOT BE PERMITTED. THE USE OF ELECTRICAL EQUIPMENT WILL BE PERMITTED ONLY WITH THE PRIOR APPROVAL OF THE OWNER.
 - PATCHING AND REPAIRS

EXISTING WORK SHALL BE CUT, ALTERED, REMOVED, TEMPORARILY REMOVED AND REPLACED, OR RELOCATED AS REQUIRED FOR THE PERFORMANCE OF THE WORK INDICATED ON THE DRAWINGS. COORDINATE ALL PATCHING AND REPAIR WORK BEFORE ANY NEW CONSTRUCTION WORK WILL REQUIRE REPAIRING AND REARRANGEMENT OF EXISTING WORK. THE MATERIALS AND METHODS OF APPLICATION FOR NEW WORK AND FOR EXISTING OR REFINISHING EXISTING WORK SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE SPECIFICATIONS EXCEPT THAT MATERIALS AND WORKMANSHIP NOT COVERED IN THE COMPLETED WORK SHALL CONFORM TO SIMILAR MATERIALS AND WORKMANSHIP EXISTING IN OR ADJACENT TO THE SPACE IN WHICH ALTERATIONS ARE TO BE MADE.

- MATERIALS
 - THE SEALANTS LISTED BELOW ARE THE PRODUCTS OF TREMCO INCORPORATED AND THE Sika CORPORATION AND ARE GIVEN AS REFERENCE STANDARDS FOR THE WORK OF THIS SECTION. THE PRODUCTS BY THE PECORA CORPORATION, GENERAL ELECTRIC COMPANY, OR REFINISHING EXISTING WORK SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE SPECIFICATIONS EXCEPT THAT MATERIALS AND WORKMANSHIP NOT COVERED IN THE COMPLETED WORK SHALL CONFORM TO SIMILAR MATERIALS AND WORKMANSHIP EXISTING IN OR ADJACENT TO THE SPACE IN WHICH ALTERATIONS ARE TO BE MADE.

05000 - METALS

ANTENNA SUPPORT STEEL

- UNLESS OTHERWISE NOTED:
 - ALL SHIMS, SHAPES AND PLATES SHALL CONFORM TO ASTM A36.
 - ALL PIPES SHALL BE ASTM A53, TYPE E OR S, GRADE B (Fy=35 KSI).
- CALVAINIZING
 - ALL STEEL AND CONNECTION MATERIAL TO BE EXPOSED TO WEATHER (ANTENNAE AND CABLE SUPPORTS) SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AND A163. TOUCH-UP FIELD WELD AREAS WITH ZINC RICH PAINT. PROVIDE TMEC 90-93 OR EQUAL.

05500 - MISCELLANEOUS METALS

HOLLOW METAL WORK

- GENERAL
 - SUBMITTALS

SHOP DRAWINGS: SUBMIT COMPLETE SHOP DRAWINGS INCLUDING SCHEDULES, CONSTRUCTION DETAILS, METHOD OF ANCHORAGE AND GAUGES OF METAL FOR APPROVAL.
- MATERIALS
 - DOORS:
 - DOORS SHALL BE 1-3/4" THICK, 1 1/2 HR. "B" LABEL, FABRICATED FROM 18 GAUGE STEEL SHEETS FOR INTERIOR DOORS. CONSTRUCTION SHALL CONFORM TO STEEL DOOR INSTITUTE STANDARD SDI-100.
 - THE INTERIOR OF THE DOORS SHALL BE COMPLETELY FILLED WITH A RIGID URETHANE CORE FOAMED IN PLACE AND CHEMICALLY BONDED TO ALL INTERIOR SURFACES. URETHANE FOAM SHALL BE SELF-BONDING, SELF-HARDENING AND SELF-EXTINGUISHING TYPE.
 - DOORS SHALL HAVE FLUSH SEAMLESS FACE SHEETS WITH VERTICAL EDGE JOINT BETWEEN FACE SHEETS COMPLETELY FILLED AND GROUND SMOOTH TO PROVIDE A SEAMLESS APPEARANCE.
 - TOP AND BOTTOM OF DOORS SHALL BE CLOSED FLUSH BY 16 GAUGE STEEL CHANNELS.

- DOORS SHALL BE MORTISED FOR 4-1/2" TEMPLATE TYPE HINGES. HINGE REINFORCEMENT SHALL BE 7 GAUGE STEEL DRILLED AND TAPPED BY THE DOOR MANUFACTURER. OTHER HARDWARE REINFORCEMENT AND PREPARATION SHALL COMPLY WITH STEEL DOOR INSTITUTE STANDARD SDI-107.
- DOORS PREPARED FOR UTES SHALL HAVE THE OPENINGS FRAMED AND SECURELY ATTACHED. GLAZING BEADS SHALL BE SHAK-IN TYPE.
- THE PRODUCT OF THE CECO COMPANY AND PIONEER INDUSTRIES WHICH CONFORM TO THESE SPECIFICATIONS ARE APPROVED FOR USE. OTHERS MAY BE USED IF APPROVED EQUAL.
- LOCKSET SHALL BE SIMPLEX 1000 WITH STRIKE, SATIN FINISH (NO SUBSTITUTES).

B. DOOR FRAMES

- DRYWALL TYPE:
 - FRAMES SHALL BE CONSTRUCTED TO CONFORM TO STEEL DOOR INSTITUTE STANDARD SDI-100.
 - FRAMES SHALL BE FORMED FROM 16 GAUGE STEEL FRAMES SHALL BE KNOCKED-DOWN FIELD-ASSEMBLED TYPE. FRAME HEAD AND JAMB MEMBERS SHALL HAVE DIE-CUT, MITERED CORNERS AND "LOCK-TAB" CONSTRUCTION.
 - FRAMES SHALL HAVE 5/8" HIGH INTEGRAL STOPS AND 2" FACES, UNLESS OTHERWISE DETAILED.
 - HINGE REINFORCEMENT SHALL BE 7 GAUGE STEEL UNIVERSAL TYPE STRIKE REINFORCEMENT SHALL BE 12 GAUGE STEEL. JAMBS SHALL BE MORTISED FOR 4-1/2" TEMPLATE HINGES AND FOR UNIVERSAL LOCK STRIKE PER ANSI A 115.1 AND 12. ALL REINFORCEMENT SHALL BE DRILLED AND TAPPED BY THE FRAME MANUFACTURER PER HARDWARE TEMPLATES. HEADS SHALL BE MORTISED AND REPAIRED FOR CLOSERS PER HARDWARE TEMPLATES. WHEN REQUIRED.

C. ANCHORS

- JAMB ANCHOR: FURNISH JAMB ANCHORS AS REQUIRED TO SECURE FRAMES TO ADJACENT CONSTRUCTION, FORMED OF NOT LESS THAN 1/4" GAUGE STEEL.
- FLOOR ANCHOR: PROVIDE FLOOR ANCHORS FOR EACH JAMB AND MULLION WHICH EXTENDS TO FLOOR, FORMED OF NOT LESS THAN 14 GAUGE STEEL SHEET.

D. SHOP PAINTING

- APPLY PRETREATMENT TO CLEANED METAL SURFACES, USING COLD PHOSPHATE SOLUTION (SSPC-PT1), HOT PHOSPHATE SOLUTION (SSPC-PR) OR BASIC ZINC CHROMATE-VINYL BUTYL SOLUTION (SSPC-PI3).
- APPLY SHOP COAT OF RUST INHIBITING PRIME PAINT WITHIN TIME LIMITS RECOMMENDED BY PRETREATMENT MANUFACTURER. APPLY A SMOOTH COAT OF EVEN CONSISTENCY TO PROVIDE A UNIFORM DRY FILM THICKNESS OF NOT LESS THAN 2.0 MILS.

E. ADJUST AND CLEAN

- FINAL ADJUSTMENTS: CHECK AND READJUST OPERATING FINISH HARDWARE ITEMS IN HOLLOW METAL WORK JUST PRIOR TO FINAL INSPECTION. LEAVE WORK IN COMPLETE AND PROPER OPERATING CONDITION. REMOVE AND REPLACE DEFECTIVE WORK, INCLUDING DOORS OR FRAMES WHICH ARE WARPED, BOWED OR OTHERWISE UNACCEPTABLE.
- PRIME COAT TOUCH-UP: IMMEDIATELY AFTER ERECTION, SAND SMOOTH ANY RUSTED OR DAMAGED AREAS OF PRIME COAT AND APPLY TOUCH-UP COMPATIBLE AIR-DRYING PRIMER.

02770 - DRESSING

- ALL FIREPROOF MATERIALS AND ASSEMBLIES SHALL BE PROVIDED BY "3M FIRE PROTECTION PRODUCTS" OR APPROVED EQUAL. MANUFACTURER SHALL DETERMINE APPROPRIATE SYSTEM FOR INDIVIDUAL APPLICATION SO AS TO MAINTAIN REQUIRED FIRE RATING.

07000 - CAULKING AND SEALING

I. GENERAL

- DOCUMENTS

WORK INCLUDED UNDER THIS SECTION IS SUBJECT TO THE AGREEMENT, GENERAL CONDITIONS AND CONTRACT DRAWINGS, ALL OF WHICH ARE HEREBY MADE A PART OF THIS SECTION.
- SCOPE

PROVIDE ALL MATERIALS, LABOR AND SUPERVISION, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE WORK OF THIS SECTION INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:

 - INTERIOR JOINTS
 - EXPANSION AND CONTROL JOINTS - SEALANT #1.
 - OTHER INTERIOR JOINTS AS INDICATED ON THE DRAWINGS - SEALANT #2.

C. SUBMITTALS

- SUBMIT SAMPLES OF ALL SEALANT MATERIALS FOR APPROVAL BY OWNER'S REPRESENTATIVE. ACCOMPANIED BY A CERTIFICATE FOR EACH TYPE SHOWING COMPLIANCE WITH THE REQUIREMENTS OF THIS SPECIFICATION.
- SUBMIT COLOR CHARTS (OR SAMPLES) FOR COLOR SELECTIONS.
- SUBMIT SCHEDULE, INDICATING USE LOCATIONS OF EACH SEALANT TYPE SUBMITTED, FOR APPROVAL.

II. MATERIALS

- THE SEALANTS LISTED BELOW ARE THE PRODUCTS OF TREMCO INCORPORATED AND THE Sika CORPORATION AND ARE GIVEN AS REFERENCE STANDARDS FOR THE WORK OF THIS SECTION. THE PRODUCTS BY THE PECORA CORPORATION, GENERAL ELECTRIC COMPANY, OR REFINISHING EXISTING WORK SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE SPECIFICATIONS EXCEPT THAT MATERIALS AND WORKMANSHIP NOT COVERED IN THE COMPLETED WORK SHALL CONFORM TO SIMILAR MATERIALS AND WORKMANSHIP EXISTING IN OR ADJACENT TO THE SPACE IN WHICH ALTERATIONS ARE TO BE MADE.

09000 - PAINTING

I. GENERAL

- SUBMITTALS
 - MANUFACTURER'S DATA: SUBMIT TWO COPIES OF MANUFACTURER'S TECHNICAL INFORMATION INCLUDING PAINT LABEL ANALYSIS AND APPLICATION INSTRUCTIONS FOR EACH MATERIAL PROPOSED FOR USE. TRANSMIT A COPY OF EACH MANUFACTURER'S INSTRUCTIONS TO THE PAINT APPLICATOR.
- APPROVED MANUFACTURERS OR APPROVED EQUAL.

III. EXECUTION

A. SURFACE PREPARATION

- JOINTS AND SURFACES WHICH ARE TO BE CAULKED OR SEALED SHALL BE CLEAN, DRY, FREE OF DUST, LOOSE MORTAR AND OTHER FOREIGN MATERIALS.

B. APPLICATION

- INSTALL JOINT BAKING WITH A BLUNT INSTRUMENT SO AS NOT TO PUNCTURE THE SURFACE. SIZE OF JOINT BAKING SHOULD BE DETERMINED BY TAKING THE JOINT WIDTH AND ADDING 25% TO ASSURE PROPER COMPRESSION OF BACKER ROD.
- APPLY SEALANT WITH A CAULKING GUN, USING PROPER SIZED NOZZLES. USE SUFFICIENT PRESSURE TO PROPERLY FILL THE JOINTS WITH SEALANT TO THE BACK-UP MATERIAL. PROVIDE MASKING TAPE FOR EXACT BEAD APPLIED. APPLY TAPE AFTER SURFACE CONDITIONER IS APPLIED.
- AFTER JOINTS HAVE BEEN COMPLETELY FILLED, THEY SHALL BE NEATLY TOOLED TO ELIMINATE AIR POCKETS OR VOIDS, AND TO PROVIDE A SMOOTH, NEAT APPEARING FINISH IN INTIMATE CONTACT WITH INTERFACING SURFACES. AFTER TOOLING, SURFACE OF SEALANT SHALL BE FREE OF RIDGES, WRINKLES, SAGS, AIR POCKETS AND EMBEDDED IMPURITIES.
- IMMEDIATELY CLEAN ADJACENT MATERIALS WHICH HAVE BEEN SOILED, LEAVE WORK IN A NEAT, CLEAN CONDITION.
- DO NOT APPLY SEALANT WHEN SURFACE TEMPERATURE OF MATERIALS IS BELOW OR ABOVE THAT RECOMMENDED BY THE MANUFACTURER.

09735 - WEATHERSTRIPPING, SEALS & THRESHOLDS

A. DOCUMENTS

WORK INCLUDED UNDER THIS SECTION IS SUBJECT TO THE AGREEMENT, GENERAL CONDITIONS AND CONTRACT DRAWINGS, ALL OF WHICH ARE HEREBY MADE A PART OF THIS SECTION.

B. SCOPE

- WEATHERSTRIPPING
- THRESHOLDS
- AUTOMATIC DOOR BOTTOMS
- DOOR SILENCERS

I. MATERIALS

- WEATHERSTRIPPING AT HEAD AND JAMBS OF HOLLOW METAL DOORS, PEMCO MODEL #319C, CLEAR ANODIZED ALUMINUM FINISH.
- THRESHOLDS, ZERO MODEL #1675A, ALUMINUM.
- AUTOMATIC DOOR BOTTOM, PEMCO MODEL #411AR, AT NEW DOOR INTO TELECOMMUNICATION ROOM.
- DOOR SILENCERS, HAGER HINGE COMPANY, MODEL #3070, 3 PER JAMB.

III. EXECUTION

- CAREFULLY COORDINATE THE WORK OF THIS SECTION WITH HOLLOW METAL WORK.
- INSTALL COMPONENTS IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

09750 - GYPSUM DRYWALL

I. GENERAL

- DOCUMENTS

WORK INCLUDED UNDER THIS SECTION IS SUBJECT TO THE AGREEMENT, GENERAL CONDITIONS, AND CONTRACT DRAWINGS, ALL OF WHICH ARE HEREBY MADE A PART OF THIS SECTION.
- SCOPE

PROVIDE ALL MATERIALS, LABOR AND SUPERVISION, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE WORK OF THIS SECTION INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:

 - GYPSUM WALLBOARD.
 - ACCESSORIES.

C. RELATED WORK SPECIFIED ELSEWHERE

- PAINTING.

II. MATERIALS

A. PRODUCTS

- GYPSUM BOARD:
 - STANDARD GYPSUM WALL BOARD, FIRE CODE "C", 5/8" THICK X 4'-0" WIDTH X LENGTH REQUIRED TO ELIMINATE HORIZONTAL JOINTS (MAXIMUM 14'-0"). BOARDS SHALL HAVE TAPERED, BEVELED BEADED EDGES. ASTM COMPLIANCE C-36.
- ACCESSORIES:
 - STUDS AND RUNNERS: GALVANIZED STEEL, 1" - 2" FURRING STRIPS, 1-5/8" AND 3-5/8" WIDE ASTM COMPLIANCE C 645. (SEE PLAN FOR LOCATIONS).
 - CULING RUNNERS AND HANGERS: GALVANIZED STEEL, 1-1/2" RUNNERS AND 1/2" (25 MSG) RESILIENT FURRING CHANNELS.
 - SCREWS: STEEL, CORROSION RESISTANT, BUGLE HEAD, LENGTH AS RECOMMENDED BY WALL BOARD MANUFACTURER FOR MATERIALS SPECIFIED. ASTM COMPLIANCE C 646.

D. TAPE AND SPACKLING COMPOUND: USE WATER RESISTANT JOINT COMPOUND.

E. ACoustICAL INSULATION (09530):

- INSTALL ACoustICAL INSULATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

F. ALL GYPSUM BOARD PARTITIONS RECEIVING ACoustICAL INSULATION SHALL HAVE ALL BUTTING PERIMETERS OF GYPSUM BOARD AND ANY ELECTRIC OR DUCT PENETRATIONS SEALED WITH ACoustICAL SEALANT.

G. APPROVED MANUFACTURERS

THE FOLLOWING MANUFACTURERS' PRODUCTS ARE ACCEPTABLE SUBJECT TO THESE SPECIFICATIONS:

- U.S. GYPSUM
- GOLD BOND

C. INSTALLATION/FASTENERS

- INSTALLATION AND FASTENERS TYPE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

09850 - RESILIENT FLOORING

FLOOR TILE

- VINYL WALL BASE/F S5-W-40, TYPE II, 4" HIGH, 0.880" GAGE, WITH MATCHING STOPS & PREFORMED CORNER UNITS, STANDARD SET-OUT, UNLESS OTHERWISE NOTED.

- APPLY WALL BASE IN LENGTHS AS LONG AS PRACTICABLE TO WALLS, COLUMNS, AND ALL PERMANENT FIXTURES WHERE INDICATED. MITERED OUTSIDE CORNERS ARE NOT ACCEPTABLE.

I. GENERAL

A. SUBMITTALS

- MANUFACTURER'S DATA: SUBMIT TWO COPIES OF MANUFACTURER'S TECHNICAL INFORMATION INCLUDING PAINT LABEL ANALYSIS AND APPLICATION INSTRUCTIONS FOR EACH MATERIAL PROPOSED FOR USE. TRANSMIT A COPY OF EACH MANUFACTURER'S INSTRUCTIONS TO THE PAINT APPLICATOR.

B. APPROVED MANUFACTURERS OR APPROVED EQUAL.

- CON-LUX, BENJAMIN MOORE, SHERWIN WILLIAMS OR GLODDEN

II. EXECUTION

A. INSPECTION AND PREPARATION

- DO NOT PAINT UNTIL OTHER WORK LIKELY TO CAUSE DUST AND DIRT HAS BEEN COMPLETED.
- DO NOT PAINT OVER DIRT, DUST, SCALE, GREASE, MOISTURE, SCUFFED SURFACES, OR CONDITIONS OTHERWISE DETRIMENTAL TO THE FORMATION OF A DURABLE PAINT FILM.
- PROTECT ALL ADJACENT SURFACES AND MATERIALS FROM PAINTING OPERATIONS. USE DROP CLOTHS TO PROTECT ADJACENT CONSTRUCTION. USE AN EASILY REMOVABLE MASKING TAPE TO PROTECT SURFACES, WHICH ARE NOT TO BE PAINTED OR WHERE A CLEAN LINE IS REQUIRED AT THE TERMINATION OF A PAINTED AREA.

B. APPLICATION

I. GENERAL

- APPLY PAINT IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.

C. CLEAN-UP AND PROTECTION

- DURING THE PROGRESS OF THE WORK, REMOVE FROM THE SITE ALL DISCARDED PAINT MATERIALS, RUBBISH, CANS, AND RAGS AT THE END OF EACH WORK DAY. AT COMPLETION OF PAINTING WORK, REMOVE ALL TOOLS, AND SURPLUS MATERIALS.

- UPON COMPLETION OF PAINT WORK, CLEAN WINDOW GLASS AND OTHER PAINT-SPATTERED SURFACES. REMOVE SPATTERED PAINT BY PROPER METHODS OF WASHING AND SCRAPPING, USING CARE NOT TO SCRATCH OR OTHERWISE DAMAGE FINISHED SURFACES.

D. PAINT SCHEDULE (BASED OFF CON-LUX)

I. INTERIOR PAINT SYSTEMS

- FERROUS METAL
PRIME: SHOP COAT
FINISH: 2 COATS SATIN-PLEX

- GYPSUM BOARD
PRIME: 1 COAT SET-PLEX
FINISH: 2 COATS SATIN-PLEX

2. EXTERIOR PAINT SYSTEMS

- MASONRY
PRIME/FINISH: PAINT NEW MASONRY INFILL PER OWNER'S REQUIREMENTS, MATCH ADJOINING AREAS.

- FERROUS METAL
PRIME: SHOP COAT
FINISH: 2 COATS STEEL GUARD

16000 - ELECTRICAL

I. GENERAL

- DOCUMENTS

ALL WORK INCLUDED UNDER THIS SPECIFICATION IS SUBJECT TO THE AGREEMENT, GENERAL CONDITIONS OF THE CONTRACT, SUPPLEMENTARY GENERAL CONDITIONS, SPECIAL CONDITIONS, AND THE CONTRACT DRAWINGS.
- SCOPE

PROVIDE ALL MATERIALS, LABOR, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE WORK OF THIS SECTION, INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:

- ELECTRICAL SERVICE
- TELEPHONE SERVICE
- DISTRIBUTION PANELBOARD
- SAFETY SWITCHES
- LIGHTING CIRCUITS
- OUTLETS, FIXTURES & CABLE TRAYS
- LIGHTING PLATES & LAMPS
- GROUNDING
- ANTENNA CABLES & ACCESSORIES

C. REFERENCE DRAWINGS AND COORDINATION

- ALL DRAWINGS LISTED ON TITLE PAGE OF PLANS INCLUDING ELECTRICAL DRAWINGS.

- THE REFERENCE DRAWINGS AND SPECIFICATIONS SHALL BE CONSIDERED AS MUTUALLY COMPLEMENTARY. ANYTHING SHOWN ON ONE OF THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS AND NOT INDICATED ON THE DRAWINGS SHALL BE CONSIDERED AS BOTH SHOWN AND SPECIFIED.

D. OTHER TRADES

- BIDDERS SHALL EXAMINE THE SITE AND THE COMPLETE SET OF PLANS AND SPECIFICATIONS COVERING THE ENTIRE PROJECT. THEY SHALL BECOME FULLY CONVERSANT WITH THE TYPE OF GENERAL CONSTRUCTION AND ALL PERTINENT FACTS AFFECTING THE COST OF CARRYING OUT THE WORK THEY WILL CONTRACT TO PERFORM.

- THIS CONTRACTOR SHALL CHECK CAREFULLY WITH OTHER CONTRACTORS SO AS TO COORDINATE THE LOCATION OF ELECTRICAL EQUIPMENT WITH THE WORK OF OTHER TRADES.

E. RULES AND REGULATIONS

ALL THE WORK SHALL BE CARRIED OUT IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE NATIONAL ELECTRICAL CODE, THE NATIONAL FIRE PROTECTION ASSOCIATION, THE NATIONAL BOARD OF FIRE UNDERWRITERS, AND THE VARIOUS AGENCIES HAVING JURISDICTION. CONTRACTOR SHALL MAKE THE NECESSARY APPLICATIONS, PAY THE REQUIRED FEES, SECURE THE PROPER PERMITS AND FURNISH THE ENGINEERS WITH CERTIFICATES OF APPROVAL OF THEIR WORK WITH COORDINATION FOR FINAL PAYMENT.

NOTHING IN THESE DRAWINGS AND SPECIFICATIONS SHALL BE CONSTRUED TO ALLOW INSTALLATION WHICH DOES NOT MEET ABOVE CODES AND REGULATIONS.

F. VISITING THE PREMISES

THE ELECTRICAL CONTRACTOR IS REQUIRED TO VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS TO BE MET IN INSTALLING THE WORK AND OTHER WORK NOT DEFINITELY SPECIFIED OR SHOWN TO PROPERLY INSTALL THE COMPLETE SYSTEM AS NO ADDITIONAL ALLOWANCE WILL BE MADE FOR ANY CHANGES HE MAY BE REQUIRED TO MAKE DUE TO EXISTING CONDITIONS.

II. PRODUCTS

A. APPROVED MANUFACTURERS

THE CATALOG NUMBER AND THE NAMES OF MANUFACTURERS INDICATE MATERIALS REQUIRED. THE PURCHASE AND INSTALLATION OF NEW SUBSTITUTE MATERIALS WILL NOT BE PERMITTED UNLESS APPROVAL IS OBTAINED IN WRITING, PRIOR TO BIDDING.

- THE CONTRACTOR SHALL INSTALL A NEW 200 AMPERE, FUSIBLE, NEMA 1, DISCONNECT SWITCH 208V, 3 PHASE AT POINT OF NEW SERVICE ENTRANCE IN 1ST FLOOR AS SHOWN ON CONTRACT DWGS. GROUNDING SHALL BE ACCOMPLISHED BY TIEING #6 AWG GROUND WIRE TO EX. WATER MAIN. SEE GROUNDING SECTION OF SPEC.

- THE CONTRACTOR SHALL RUN A DEDICATED 2-1/2" GALVANIZED STEEL RACEWAY FROM THE NEW SERVICE ENTRANCE IN 1ST FLOOR TO A POINT NEAR THE TELECOMMUNICATION ROOM AS SHOWN ON THE DRAWINGS. SUPPORT THE CONDUIT NEAR THE CEILING AS REQUIRED. CONTRACTOR SHALL EXTEND 2-1/2" CONDUIT TO THE MAIN DISCONNECT SWITCH IN THE 1ST FLOOR CELL SITE. THE 2-1/2" GALVANIZED STEEL RACEWAY SHALL CARRY 1-#6 AWG THWN TYPE CABLES & 4-4/0 AWG GROUNDING WIRES. THE CONTRACTOR SHALL INSTALL JUNCTION BOXES PER N.E.C. REQUIREMENTS.

- THIS CONTRACTOR SHALL OBTAIN FROM THE UTILITY COMPANY A LIST OF EQUIPMENT NECESSARY FOR THE MOUNTING OF THE CHECK METERING FACILITIES, AND SHALL PROVIDE AND MOUNT SAME WITH THE UTILITY COMPANY'S INSTRUCTION.

III. EXECUTION

A. ROUGH-IN

- VERIFY FINAL LOCATIONS FOR ROUGH-INS WITH FIELD MEASUREMENTS AND REQUIREMENTS OF THE ACTUAL EQUIPMENT TO BE CONNECTED.

- CONTRACTOR SHALL CONSULT WITH ENGINEER PRIOR TO BEGINNING WORK WHEN DISCREPANCIES OR CONFLICTS ARE DISCOVERED IN THE FIELD DURING ROUGH-IN PROCEDURES.

- CONTRACTOR SHALL BE RESPONSIBLE FOR ERRORS MADE, FOR NOT FOLLOWING THESE REQUIREMENTS.

C. TELEPHONE SERVICE

- THE CONTRACTOR SHALL ARRANGE WITH THE TELEPHONE COMPANY FOR BRINGING TELEPHONE SERVICE TO THE NEXTEL FACILITY IN THE BUILDING AND PAY FOR ALL CHARGES FOR SAME.
- AT TELEPHONE OUTLET PROVIDE A 4" SQUARE BOX WITH BLANK PLATE TO MATCH RECEPTACLE PLATES.

D. DISTRIBUTION PANELBOARD

- FURNISH AND INSTALL A DISTRIBUTION PANELBOARD FOR LIGHT AND POWER DISTRIBUTION, AS SHOWN ON DRAWINGS AND DESCRIBED HEREIN.
- THE DISTRIBUTION PANEL SHALL BE 208Y/120 VOLT, 3 PHASE, 4 WIRE, 200 AMP, SOLID NEUTRAL AND SHALL CONSIST OF BREAKERS ATTACHED TO THE PANEL BUSSES WITH BOLTED LINK CONNECTIONS HOUSED WITHIN A CODE GAUGE, NEMA 1, GENERAL PURPOSE ENCLOSURE AS SHOWN ON THE DRAWINGS. THE NUMBER OF POLES AND TRIP SETTINGS SHALL BE AS SHOWN ON THE DRAWINGS.

- PANEL SHALL HAVE A NEATLY TYPED WRITTEN CIRCUIT DIRECTORY IN A METAL FRAME WITH A TRANSPARENT COVER ON THE INSIDE OF THE DOOR.

E. SAFETY SWITCHES

- SWITCHES SHALL BE OF THE TOTALLY ENCLOSED, LOCKABLE TYPE AND MADE OF THE QUICK-MAKE, QUICK-BREAK MECHANISM WITH FOUR POLES AS SHOWN ON DRAWINGS. FUSIBLE SWITCH SHALL BE EQUIPPED WITH DUAL, ELEMENT TIME DELAY TYPE FUSE.

- SWITCH SHALL BE AS MANUFACTURED BY SQUARE "D" - HEAVY DUTY, CLASS 3110, NEMA 1 ENCLOSURE, RATED FOR 200 AMPERES - OR EQUAL.

F. LIGHTING & RECEPTACLE CIRCUITS

- FURNISH AND INSTALL ALL CONDUITS, OUTLETS, BOXES, WIRES, SWITCHES, RECEPTACLES, ETC. FOR THE COMPLETE LIGHTING AND RECEPTACLE SYSTEMS AS SHOWN ON THE DRAWINGS.
- CONDUIT SHALL BE NEATLY RACKED AND SECURELY FASTENED AT RIGHT ANGLES AND PARALLEL TO BUILDING LINES.

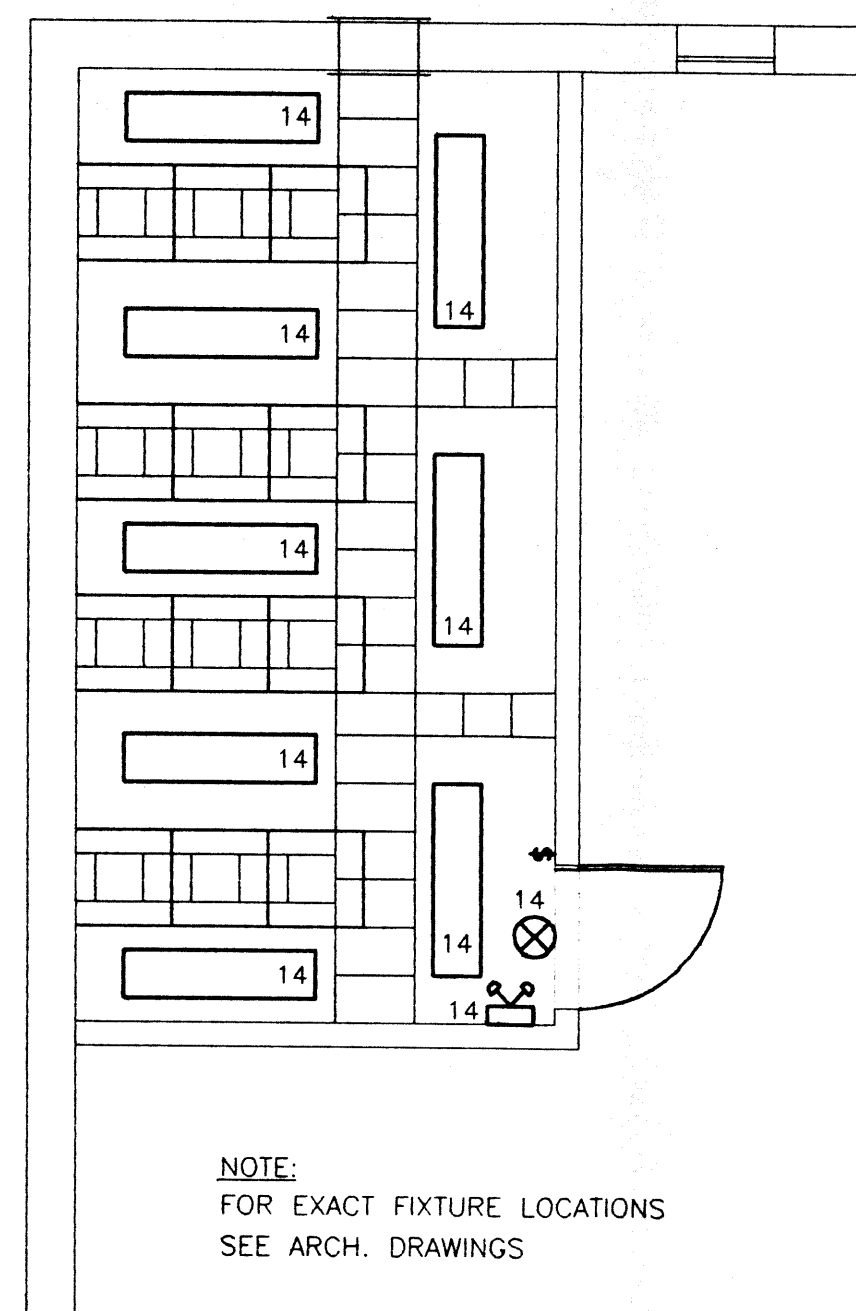
- CIRCUIT WIRING SHALL BE DONE WITH EMT CONDUIT AND SHORT LENGTHS OF ARMORED CABLE. CONDUIT SHALL BE NEATLY RACKED AND SECURELY FASTENED AT RIGHT ANGLES AND PARALLEL TO BUILDING LINES. THE WORK SHALL BE DONE WITH THWN STRANDED WIRE, #12 MINIMUM. BOXES SHALL BE OF #16 GAUGE STAMPED STEEL, K.O. AND OF THE TYPE AND SIZE REQUIRED BY THE N.E.C. AND OF THE DIMENSIONS TO HOUSE THE DEVICES AND SPLICES WITHOUT CROWDING. SPLICES SHALL BE MADE WITH APPROVED WIRE-NUTS OF MANUFACTURE OF "SCOTCH-LOCK" CONNECTORS.

G. DEVICES, PLATES AND CABLE TRAYS

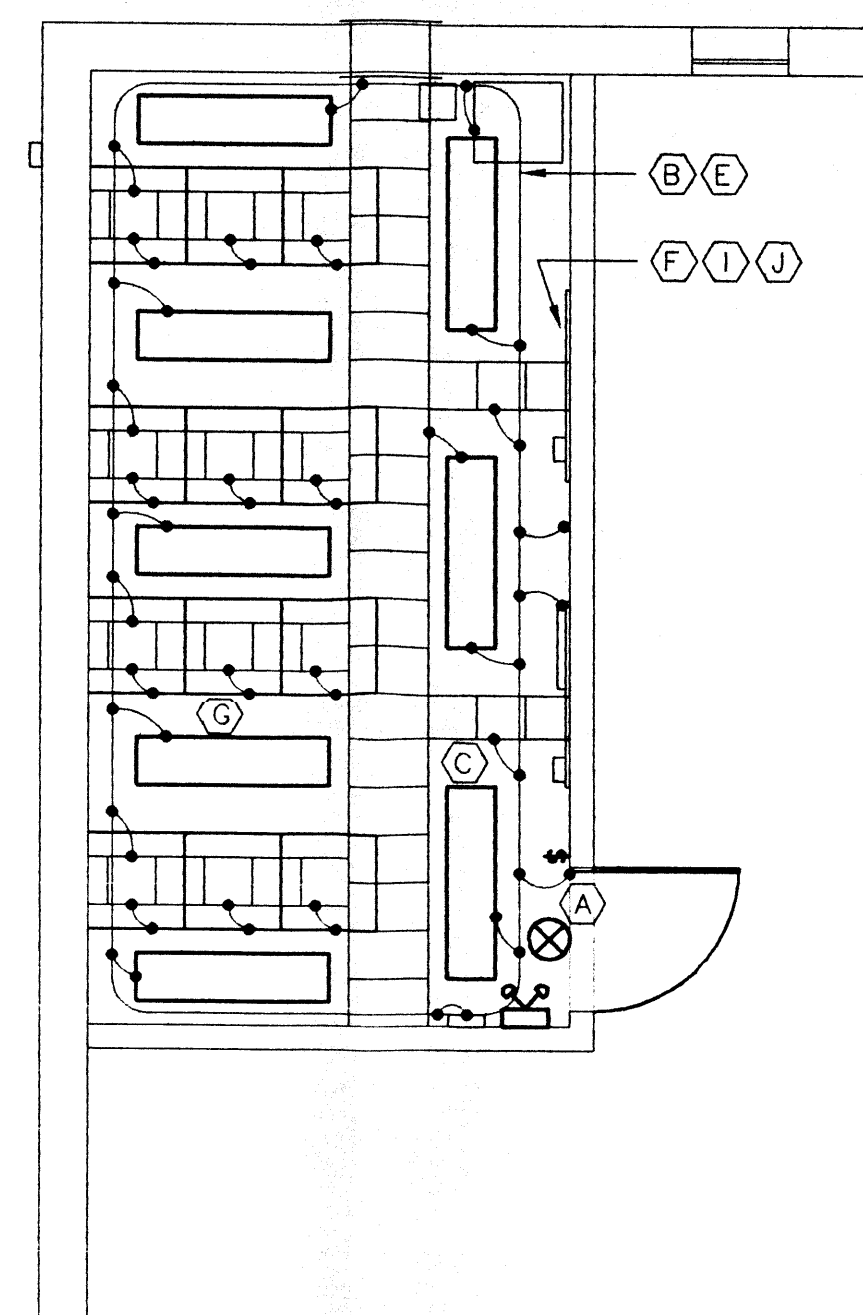
- PROVIDE AT EVERY INDICATED OUTLET THE PROPER DEVICE AND PLATES AS HEREINAFTER SPECIFIED. WHERE MORE THAN ONE DEVICE IS INDICATED IN ONE LOCATION, THEY SHALL BE GANGED TOGETHER IN ONE BOX AND UNDER ONE PLATE, AS REQUIRED.

- RECEPTACLES, WHEN INSTALLED OUTSIDE, EXPOSED OR IN PLACES WHERE SUBJECT TO SPRAY OR UNUSUAL CONDITIONS, SHALL BE EQUIPPED WITH WEATHER-PROOF TYPE COVERS WITH GASKETS AND THREE-PRONG RECEPTACLES, RUBBER OR BRYANT. PLATES SHALL BE STAMPED SHERADIZED STEEL.

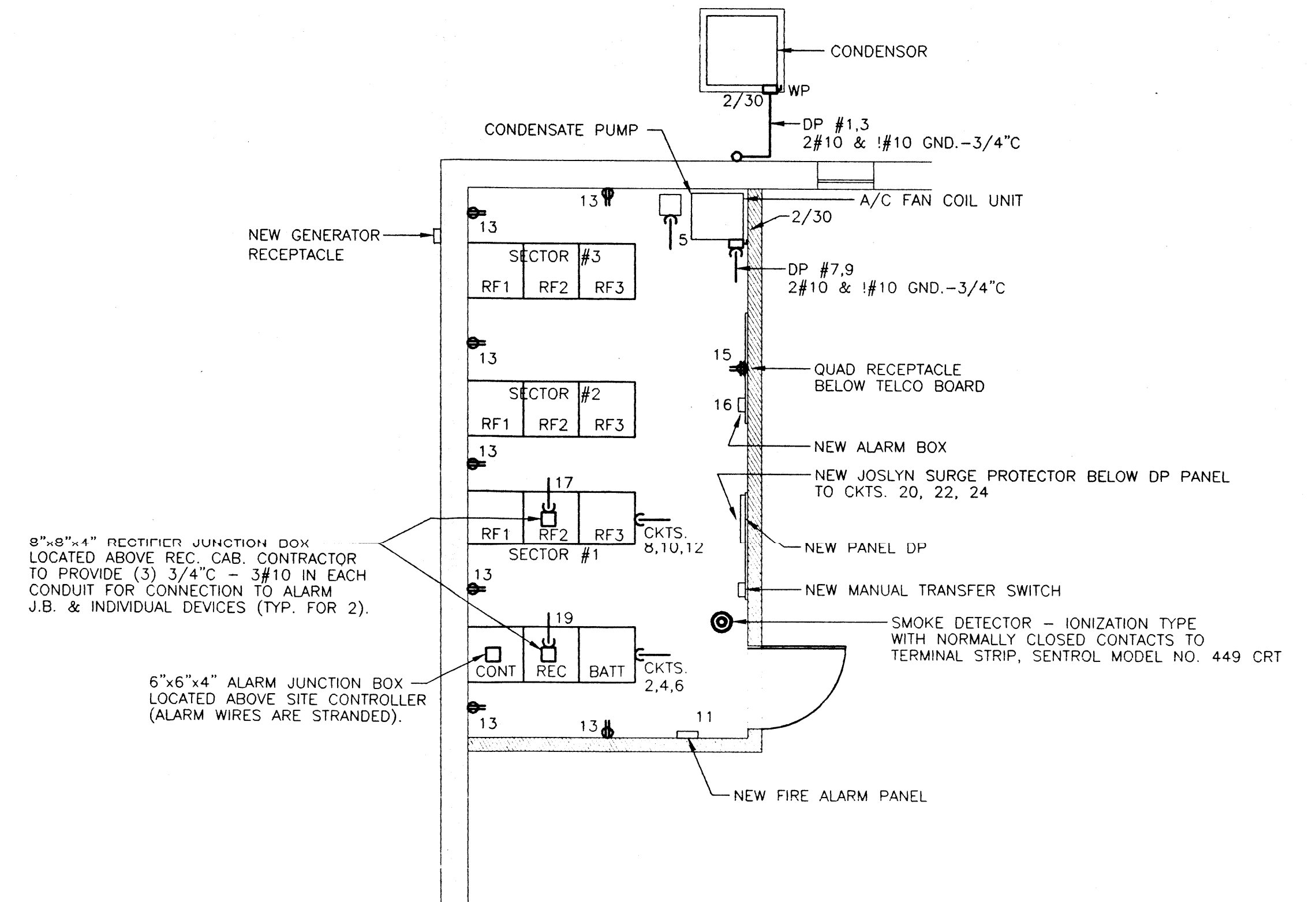
- CABLE TRAY SYSTEMS SHALL BE FABRICATED OF STEEL TROUGH SECTIONS WITH HOT DIP GALVANIZED FINISH. AFTER FABRICATION, FOR OUTDOOR USE, AND PRE-GALVANIZED FINISH FOR INDOOR USE. TRAY WIDTH AND DEPTH SHALL BE 12" AND 6" RESPECTIVELY. TRAYS SHALL BE ROUTED AS SHOWN ON DRAWINGS AND SHALL BE COVERED EVERY 5 FT. ROOF CABLE TRAYS SHALL BE COVERED WITH PEAKED, FLANGED TYPE NON-VENTILATED COVER, SCHEDULE 40. FOR OUTDOOR USE,



A REFLECTED CEILING PLAN
1/4" = 1'-0"



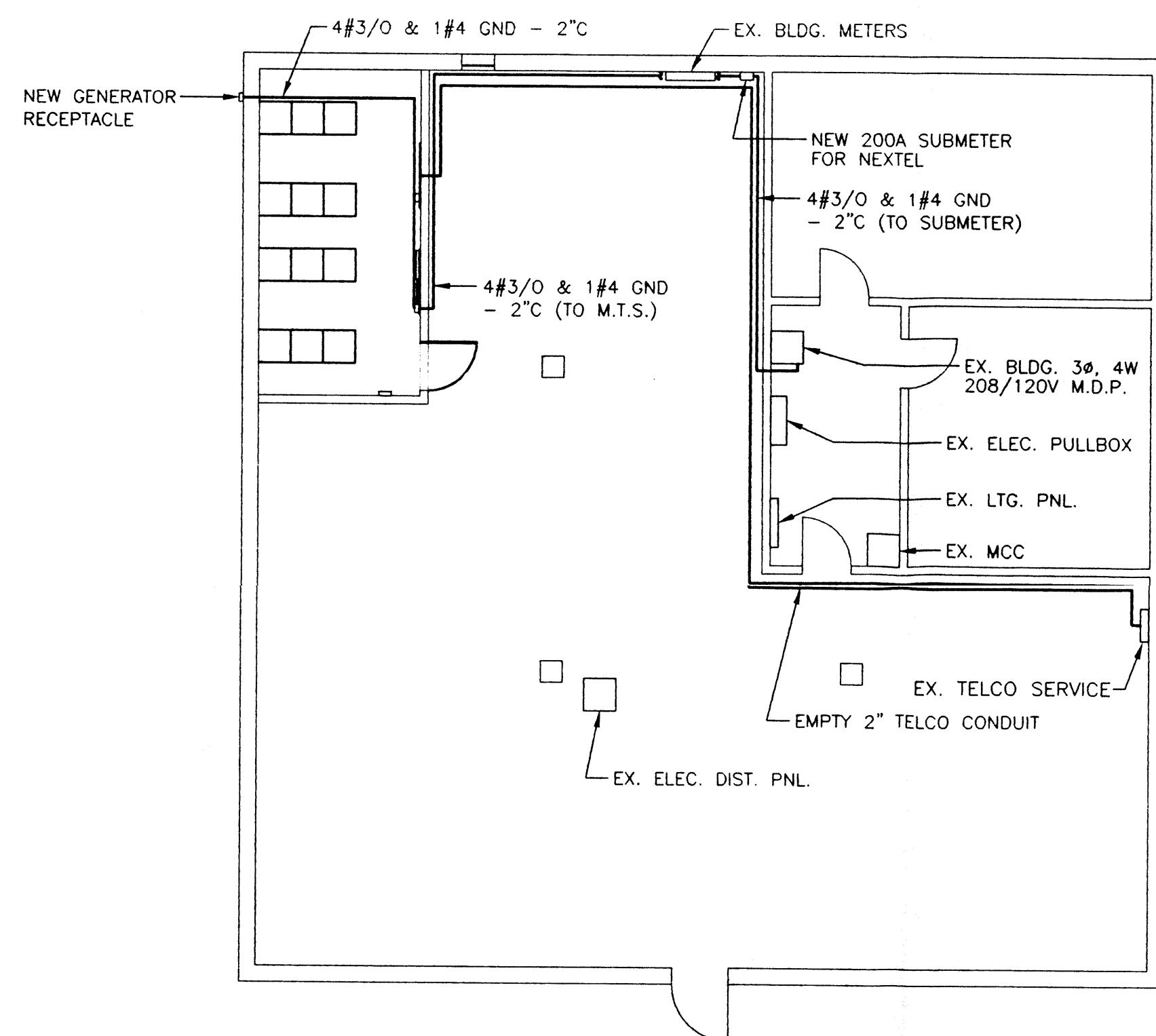
B GROUNDING PLAN
1/4" = 1'-0"



C EQUIPMENT PLAN
1/4" = 1'-0"

NOTES:

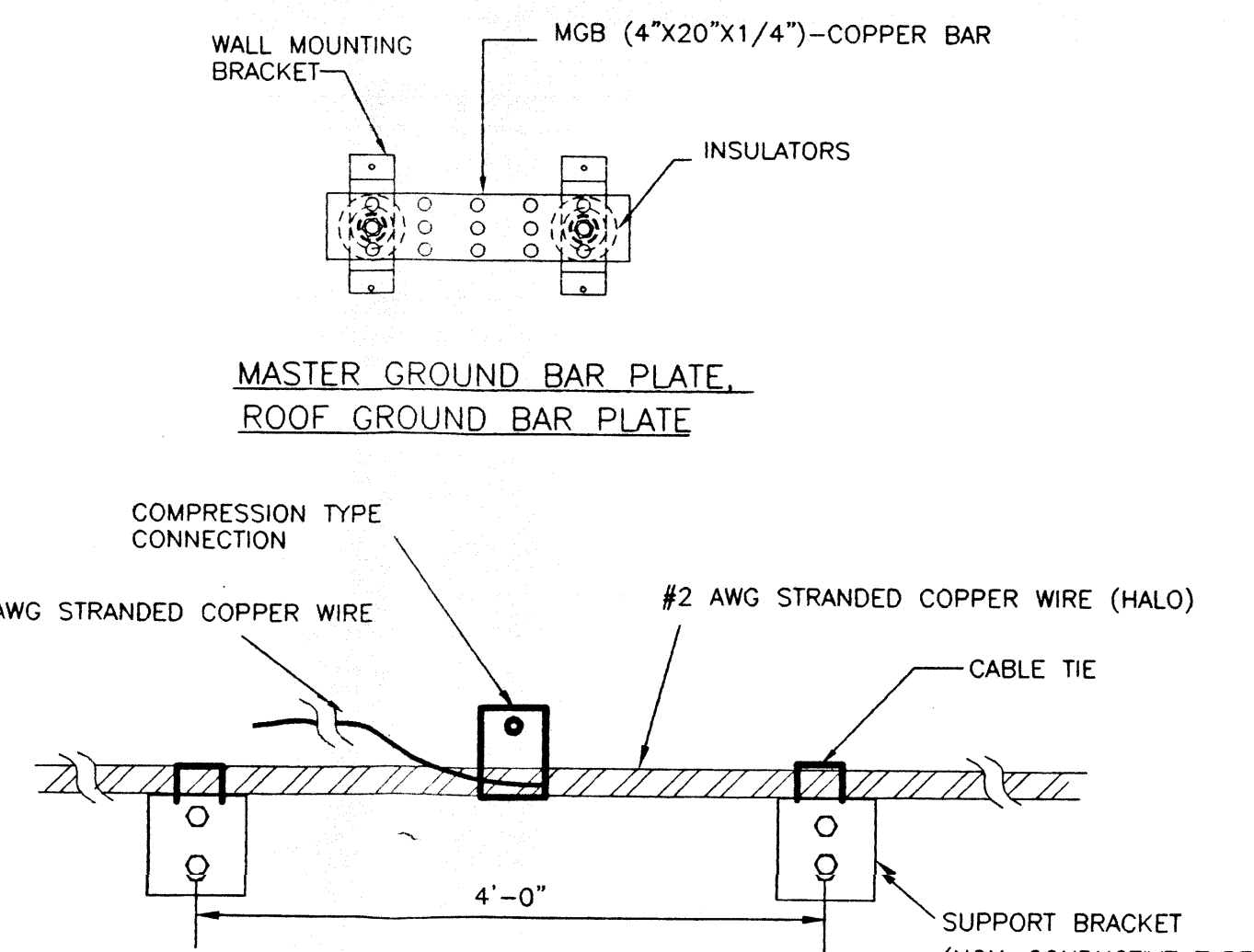
1. SECTORS 2 AND 3 FUTURE - NOT IN THIS SCOPE OF WORK.
2. PROVIDE SHALL MEAN FURNISH AND INSTALL.



C OVERALL BUILDING PLAN
1/4" = 1'-0"

EQUIPMENT

- CONCEALED #6 GRD. TO STEEL BUCKS (EACH SIDE & LINTEL) AND DOOR WITH CLAMPED OR CRIMPED CONNECTION
- #6 GRD. GREEN INSUL. WIRE WITH CLAMPED OR CRIMPED CONN. TO ROOM PERIMETER GROUND CABLE (TYP.)
- #6 GREEN INSUL. WIRE BOUND JUMPERS AT ALL CABLERACK CONN. VISIBLY SCRAPE EXISTING PAINT TO INSURE GROUNDING INTEGRITY (TYP.)
- (3) - 6" GALV. SLEEVES.
- #2 AWG STRANDED COPPER WIRE (PERIPHERAL) ATTACHED AT 7'-4" A.F.F. (SEE DETAIL)
- GRD. BAR PLATE INSIDE ROOM.
- #6 AWG. INSUL. STRANDED COPPER WIRE FROM RADIO EQUIPMENT TO GND. BAR (BY EQUIP. INSTALLER)
- CONTRACTOR TO CADWELD #2 AWG INSUL. GRD. CABLE FROM GRD. BAR PLATE TO EXIST. WATER MAIN PIPE. VERIFY EXACT LOCATION WITH NEXTEL CONST. MGR. & OWNER.
- GRD. BAR PLATE OUTSIDE ROOM.
- #2 AWG GROUND WIRE ROUTED TO ROOF. ROUTE ADJACENT TO ANTENNA CABLE.



PERIPHERAL GROUNDING WIRE (HALO) CONNECTION DETAIL

HALO ROOM GROUND CONDUCTOR
EQUIPMENT TO BE CONNECTED BY COMPRESSION TYPE CONNECTION TO HALO GROUNDING WIRE INCLUDE:

1. OVERHEAD CABLE RACKING ALL JUMPED TOGETHER
2. DOOR FRAMES
3. HVAC FRAMES
4. NEW ELECTRICAL PANEL
5. ALL OTHER NON-RBA AND METALLIC EQUIPMENT
6. ANY OTHER PERMANENT, SIGNIFICANT, METAL OBJECT WITHIN SEVEN FEET OF ANY OTHER GROUND OBJECT
7. ELECTRICAL UNIT HEATER

EQUIPMENT GROUND BAR (BY EQUIPMENT INSTALLER)

1. ON EXTERIOR OF BUILDING BELOW GALV. SLEEVES
2. ON INSIDE BELOW SLEEVES
3. ON ROOF JUST BEFORE CABLES LEAVE ROOF

#2 SOLID CAD WELD FROM ROOF TO OUTSIDE OF ROOM (GROUND CONNECTION TO BE KEPT OUTSIDE OF ROOM) THEN RUN TO WATER MAIN.

EQUIPMENT TO BE CONNECTED TO THE EQUIPMENT GROUND BAR:

1. RACK GROUND CONNECTIONS ON ALL RADIO RACKS
 2. GROUND BARS ON ALL DC POWER DISTRIBUTION PANELS
 3. TRANSMISSION RACKS
 4. TELEPHONE PROTECTION GROUNDING TERMINAL
- * BY EQUIPMENT INSTALLER

NORTHEAST UTILITIES CO.
LOAD LETTER FILED WITH MARTY COLADARCI

AT & T
THOMAS C. FORD COMMUNICATIONS TECHNICIAN
1-203-879-2558

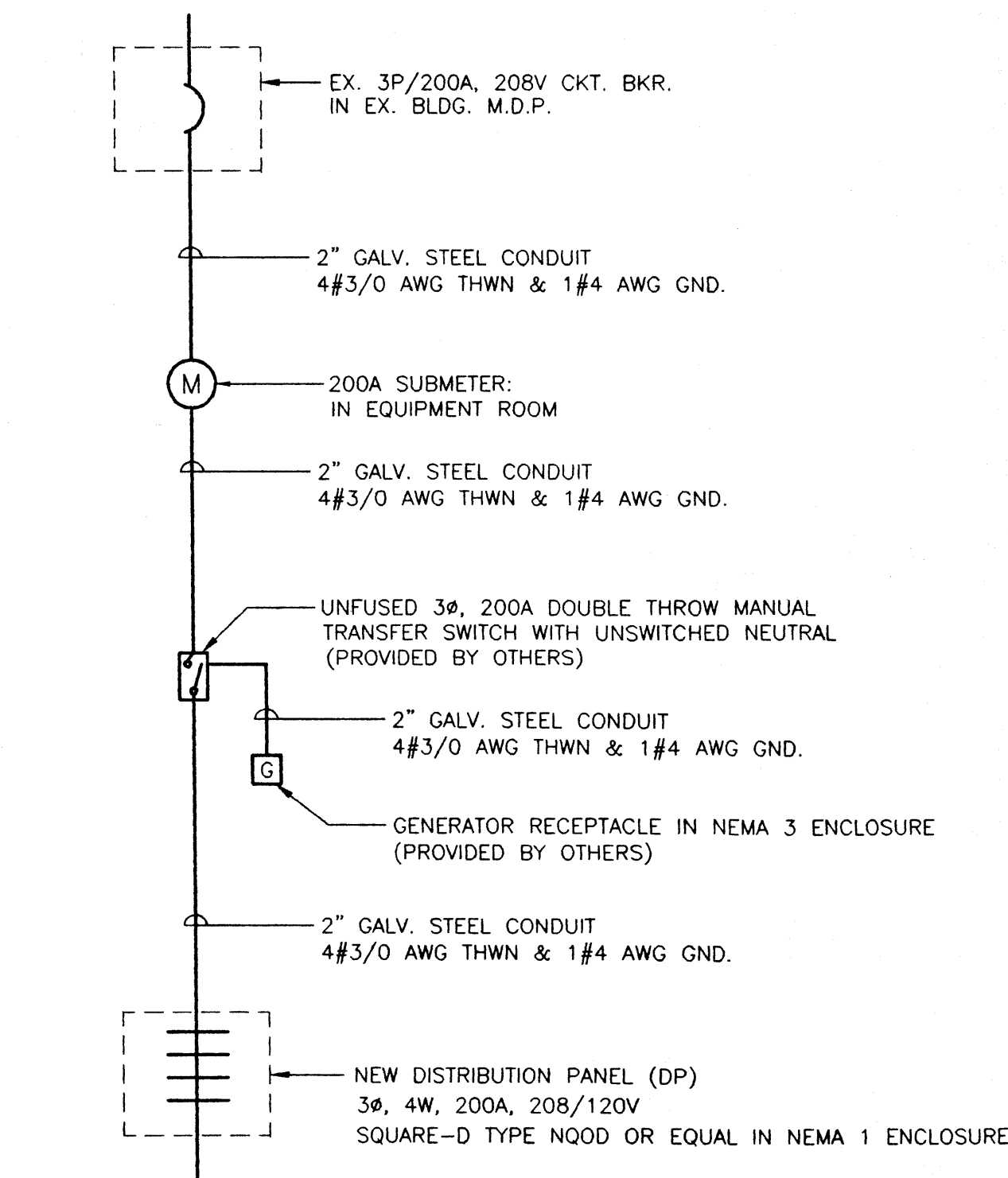
NOTE:

ELECTRICAL WORK IS NOT PART OF THE BUILDING PERMIT APPLICATION.

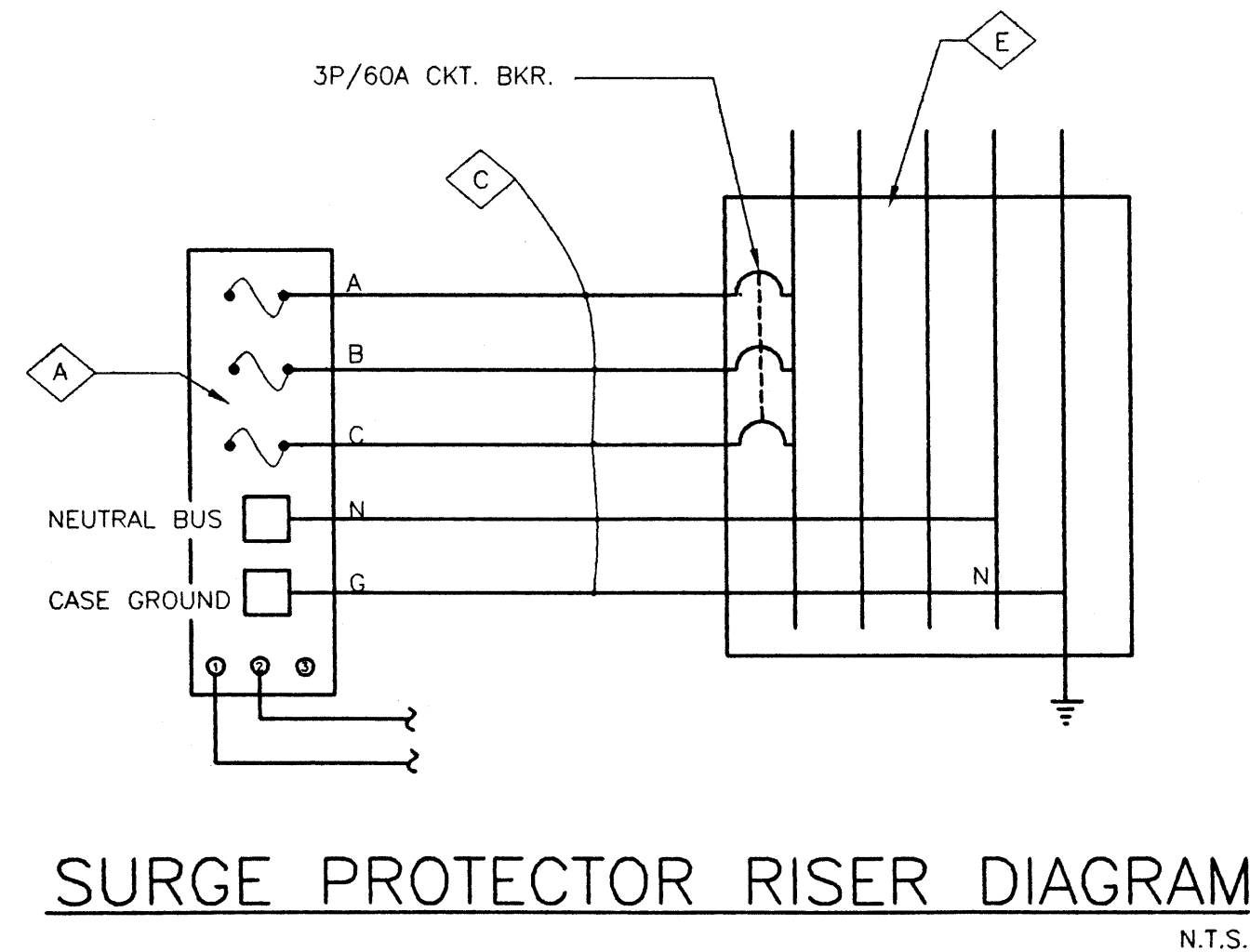
SYMBOL LIST

	MANUAL TRANSFER SWITCH		EXIT LIGHT
	QUADPLEX RECEPTACLE		SMOKE DETECTOR
	DUPLEX CONVENIENCE RECEPTACLE		THERMOSTAT (HARD WIRED NOT REMOTE)
	SINGLE POLE LIGHT SWITCH		GROUND ROD
	SURFACE MTD. LIGHT FIXTURE DP CKT. #12 (TYP.)		CONDUIT TURNED DOWN
	EMERGENCY LIGHTING FIXTURE DP CKT. #12 (TYP.)		CONDUIT TURNED UP
			UNFUSED DISCONNECT SWITCH NUMBERS INDICATE # OF POLES/SWITCH SIZE

1	ISSUED FOR CLIENT REVIEW	TJA	15 APR 97
REV	REVISION DESCRIPTION	BY	DATE
EI ASSOCIATES ARCHITECTURE • ENGINEERING • CONSTRUCTION 115 Evergreen Pl. • E. Orange, NJ 07018 • (201) 672-5100		ELECTRICAL CLIENT DWG. NO. _____	
GAETANO P. CIPRIANO PROFESSIONAL ENGINEER CT LICENSE NO. 15383		ELECTRICAL CLIENT DWG. NO. _____	
SCALE AS NOTED DRAWN BY: ASD DESIGNED BY: ASD CHECKED BY: ASD APPROVED BY: ASD PROJECT MANAGER: ASD		PROJECT NEXTEL COMMUNICATIONS SITE # CT-0066 16 TITICUS MOUNTAIN ROAD NEW FAIRFIELD, CT TITLE FLOOR, REFLECTED CEILING, GROUNDING PLAN, & DETAILS	
		EIA PROJECT NO. EE4444 EIA DRAWING NO. E-1	
		ISSUE DATE 15 APR 97 REVISION _____	



ONE LINE DIAGRAM
N.T.S.



SURGE PROTECTOR KEY NOTES	
A	AC SURGE PROTECTOR: JOSLYN SURGITRON I MODEL NO. 1455-85-MN 208/120V, 60 HZ, 3Ø, 4W
B	GROUND AS PER N.E.C. SEC. 250
C	5 #4 CU, 1" C SHALL BE TERMINATED ON THE NEW 3P/60A BREAKER OF THE NEW 200A CIRCUIT BREAKER PANEL
D	2 #22 SOLID WIRE (RED/BLACK) INSULATION NON-SHIELDED CABLE, 1/2" CONDUIT, ALARM WIRES TO TELCO BOARD
E	NEW CIRCUIT BREAKER PANEL

SURGE ARRESTOR GENERAL NOTES:

- GROUND BUS IN SURGE ARRESTOR IS UTILIZED ONLY AS AN EQUIPMENT CASE GROUND.
- ALL CONDUCTORS SHALL BE FANNED OUT SMOOTHLY, NO RIGHT ANGLE BENDS ARE PERMITTED. POSITION ALL LEADS A, B, C, N, G TOGETHER SO THAT THEY WILL BE IN CLOSE PROXIMITY TO EACH OTHER. LENGTH SHALL BE AS SHORT AS POSSIBLE BUT NOT LONGER THAN 8'.
- WIRING FROM THE SURGE ARRESTOR TO THE NEW CIRCUIT BREAKER PANEL SHALL BE #4 CU, OR AS SPECIFIED BY SURGE ARRESTOR MANUFACTURER.
- SURGE ARRESTOR FURNISHED BY NEXTEL AND INSTALLED BY CONTRACTOR.

DISTRIBUTION PANEL SCHEDULE											
PANEL: _____ DP _____			MOUNTING: <input checked="" type="checkbox"/> SURFACE			<input type="checkbox"/> MAIN LUGS ONLY			200 AMP MAIN CB		
208Y/120V, 3 PHASE, 4 WIRE			<input type="checkbox"/> FLUSH			<input type="checkbox"/> FEED THROUGH LUGS			_____ AMP BUS		
22,000 MIN. A.I.C. SYM.,			<input type="checkbox"/> IN MCC			<input type="checkbox"/> SHUNT TRIP MAIN					
CKT. NO.	LOAD	TRIP	KVA/PHASE			KVA/PHASE			TRIP	LOAD	CKT. NO.
			A	B	C	A	B	C			
1	3 TON OUTDOOR CONDENSING UNIT	30	3.0			3.0			30	RADIO EQUIPMENT POWER SUPPLY	2
				3.0			3.0		30	RADIO EQUIPMENT POWER SUPPLY	4
5	CONDENSATE PUMP	20			0.5			3.0	30	RADIO EQUIPMENT POWER SUPPLY	6
7	3 TON AHU W/ 5KW HEAT	30	2.5			3.0			30	RADIO EQUIPMENT POWER SUPPLY	8
				2.5			3.0		30	RADIO EQUIPMENT POWER SUPPLY	10
11	FIRE ALARM PANEL	20			0.11			3.0	20	RADIO EQUIPMENT POWER SUPPLY	12
13	DUPLEX RECEPTACLES	20	1.26			0.75			20	INTERIOR LIGHTING EMERGENCY LIGHTING	14
15	TELCO QUAD RECEPT.	20	1.5			0.5			20	ALARM SYSTEM INCL. MAG. DR. ALARM	16
17	ALARM POWER	30			-			-	20	SPARE	18
19	ALARM POWER	30	-						60	JOSLYN SURGE PROTECTOR	20
21	SPARE	20		-			-				22
23	SPARE	20			-			-			24
41											42
SUB-TOTALS			6.8	7.0	0.2	6.8	6.5	6.0			
TOTAL			33.3								

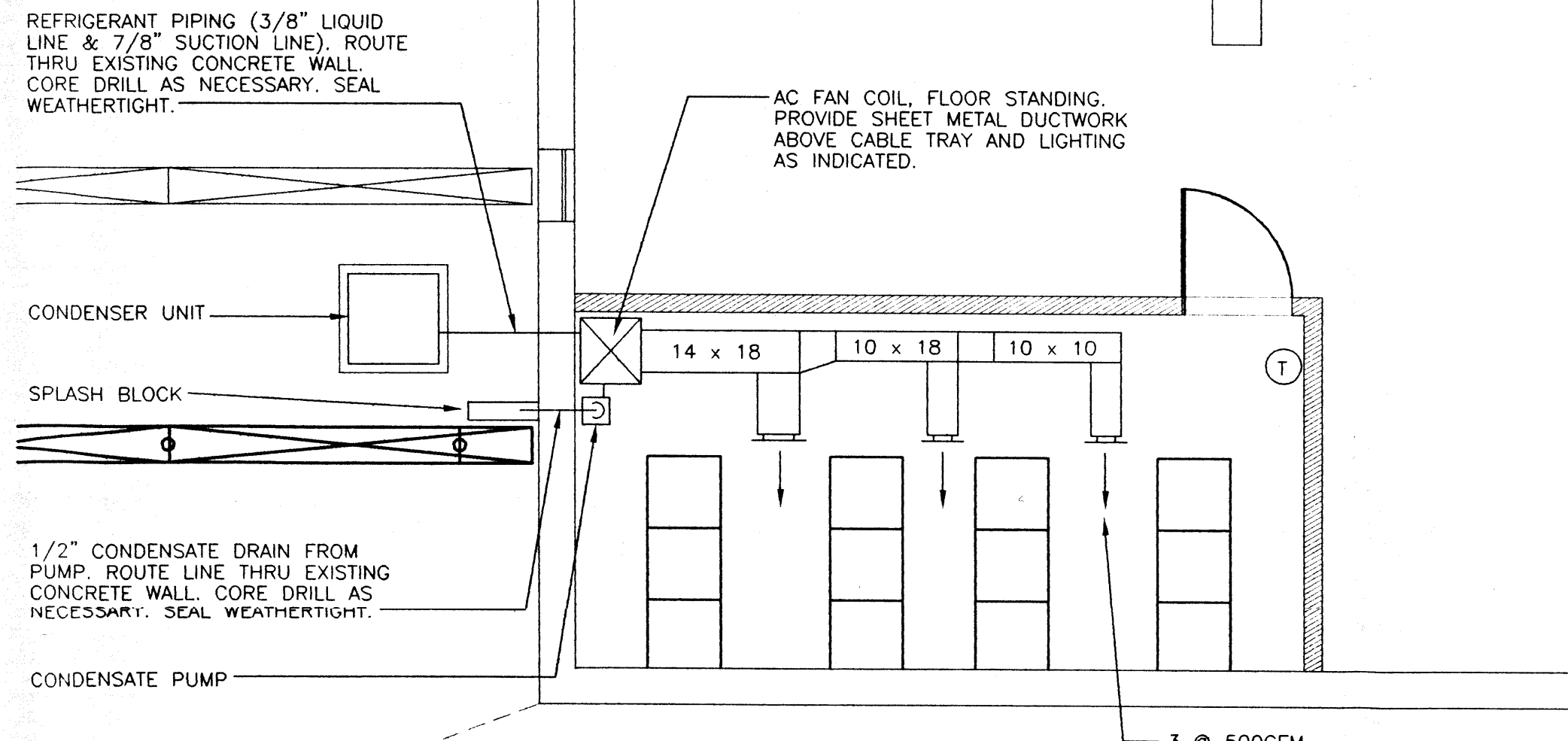
FOR 120/208 VOLT BRANCH CIRCUIT WIRING, THE MINIMUM WIRE SIZE SHALL BE AS FOLLOWS:

20 AMP. CIRCUIT BREAKER ---- # 12 AWG
30 AMP. CIRCUIT BREAKER ---- # 10 AWG
40 AMP. CIRCUIT BREAKER ---- # 8 AWG
60 AMP. CIRCUIT BREAKER ---- # 6 AWG
ALL CONTROL WIRING #14 AWG

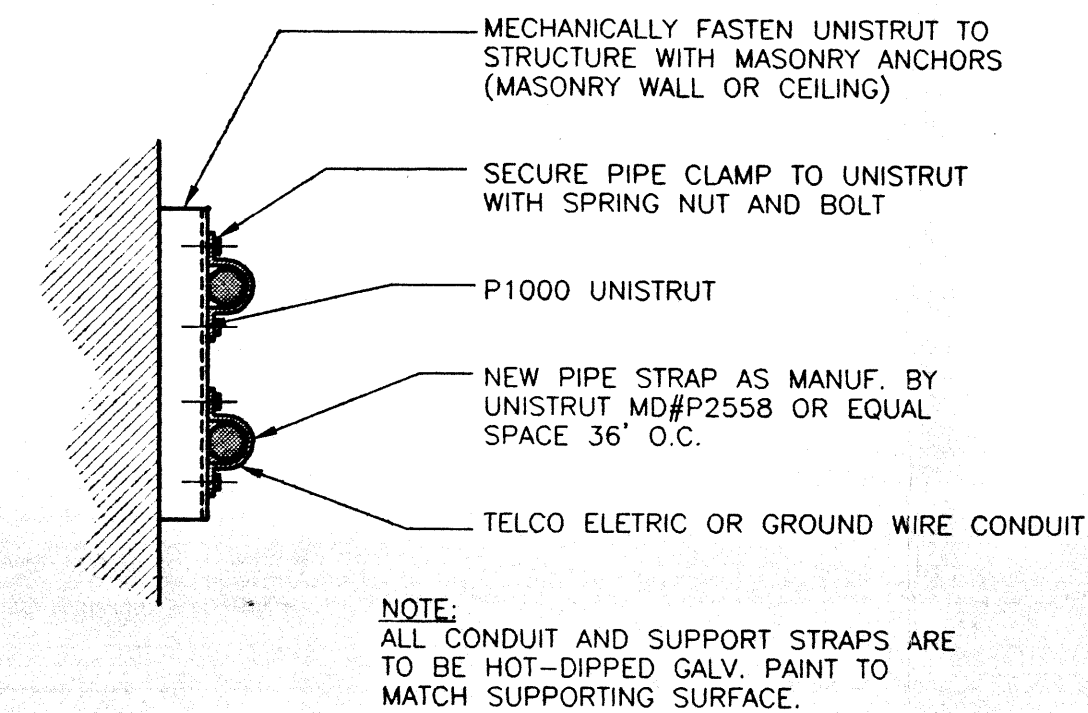
LIGHTING FIXTURE SCHEDULE						
SYMBOL	WATTS	VOLTS	DESCRIPTION	MOUNTING	MANUFACTURER & CATALOG NO.	LOCATION/REMARKS
	90	120	SURFACE TYPE, COMMERCIAL, LOW-PROFILE, WRAPAROUND, ACRYLIC PRISMATIC DIFFUSER W/ SONIC-WELDED, LUMINOUS ENDS	SURFACE	LITHONIA LIGHTING #LB-2-40-120-A-ESB GMF/RI/FR 120V, FLUORESCENT	NEXTEL EQUIP. RM./ PROVIDE SLOW BLOW FUSE
	7.0	120	TITAN, DIE-FORMED STEEL EXIT SIGN, UNIVERSAL MOUNT'G, WHITE ON RED LETTERING	WALL	LITHONIA LTG. X-P-W-R-120-EL	EXIT AS SHOWN
	10.8	120	QUANTUM, POLYCARBONATE EMERGENCY LTG. UNITS, LEAD-CALCIUM BATTERY	WALL	LITHONIA LTG. ELM-H	AS SHOWN ON DRAWINGS

GENERAL NOTES:

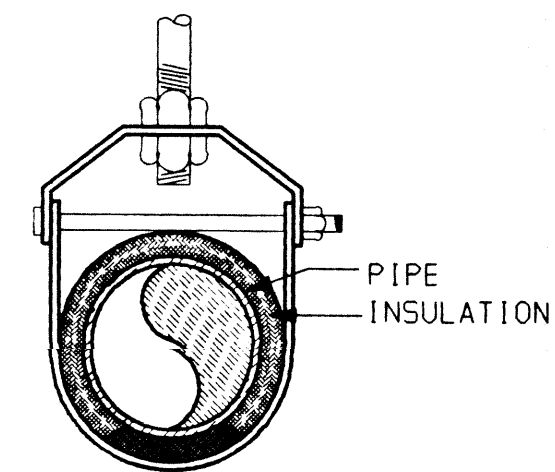
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH REQUIREMENTS OF NEC AND OTHER APPLICABLE CODES AND AGENCIES HAVING JURISDICTION.
- PROVIDE EQUIPMENT GROUNDING AS PER NATIONAL ELECTRICAL CODE REQUIREMENTS, AND NEXTEL SPECIFICATIONS.
- COORDINATE WITH OTHER TRADE CONTRACTORS FOR THE SCOPE OF INSTALLATION WORK AND POWER SUPPLY FOR THEIR CONTROL SYSTEMS.
- ALL WIRES SHALL BE TYPE THWN STRANDED COPPER, WITH INSULATION RATED 600V, #12 AWG MINIMUM, IN 3/4" MIN. SIZE GALVANIZED STEEL CONDUIT, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL SUBMIT, FOR THE ENGINEER'S APPROVAL, DETAILED SHOP DRAWINGS OF ALL EQUIPMENT SPECIFIED, AS WELL AS DETAILED INSTALLATION LAYOUTS.
- CONDUIT SHALL RUN AT RIGHT ANGLES OR PARALLEL TO BUILDING LINES AND SHALL BE NEATLY RACKED AND SECURELY FASTENED. INSULATED BUSHINGS AND DOUBLE LOCKNUTS SHALL BE USED THROUGHOUT. PULL BOXES AS PER N.E.C. REQUIREMENT SHALL BE PROVIDED TO FACILITATE THE INSTALLATION OF CABLES.
- ALL CONDUITS SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN ACCORDANCE WITH THE REQUIREMENTS OF THE N.E.C. FURNISH AND INSTALL EXPANSION TYPE FITTINGS WHEREVER CONDUITS PASS THROUGH STRUCTURAL EXPANSION JOINTS.
- UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE ELECTRICAL CONTRACTOR SHALL TEST THE COMPLETE ELECTRICAL SYSTEM FOR SHORT CIRCUITS, GROUNDS, AND PROPER OPERATION IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.
- LOCATIONS OF ELECTRICAL EQUIPMENT AND DEVICES ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD.
- SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF LIGHTING FIXTURES, AND MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF MECHANICAL EQUIPMENT.
- COORDINATE ALL ELECTRICAL WORK AND POWER SHUTDOWN WITH THE OWNER.



A HVAC PLAN
1/4" = 1'-0"



B CONDUIT SUPPORT DETAIL
1-1/2" = 1'-0"



NOTE:
HANGERS AND COMPONENTS SHALL BE COATED WITH RUST RESISTANT PRIMER

INSULATED PIPES ON CLEVIS HANGERS
N.T.S.

NOTE:
ELECTRICAL WORK IS NOT PART OF THE BUILDING PERMIT APPLICATION.

EQUIPMENT SPECIFICATIONS

1.0 GENERAL

THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, TRANSPORTATION, SERVICE AND APPLIANCES NECESSARY FOR RECEIVING INSTALLING, TESTING AND ADJUSTING OF NEW AIR CONDITIONING SYSTEM FOR NEW EQUIPMENT ROOM.

2.0 AIR CONDITIONING SYSTEM

PROVIDE THE FOLLOWING "DX SPLIT SYSTEM":

AC SYSTEM SHALL BE A FLOOR MOUNTED FAN COIL, TOP DISCHARGE AS MANUFACTURED BY CARRIER, MODEL FB4ANF036000, 36,000 BTUH COOLING W/ UNIT MOUNTED 24V. CONTROLS, 208/230 V/1Ø/60HZ (370 WATTS) ELECTRICAL SERVICE. UNIT SHALL BE FURNISHED COMPLETE WITH ALL STANDARD EQUIPMENT. UNIT MOUNTED CONTROLS, FAN SPEED AND TEMPERATURE CONTROL SWITCHES. UNIT SHALL ALSO COME WITH FACTORY INSTALLED, 5KW ELECTRIC HEATER.

PROVIDE CARRIER THERMOSTAT, W/AUTO CHANGEOVER, NON-PROGRAMMABLE, 1-STAGE HEAT, 1-STAGE COOL, MODEL #TSTATCCNAC01.

OUTDOOR AIR COOLED CONDENSING UNIT SHALL BE CARRIER, MODEL NO. 38CKB036-3, 230V. SINGLE PHASE, 60HZ., NOMINAL 3 TON CAPACITY.

FIELD INSTALLED OPTIONS:
LOW AMBIENT CONTROL, MODEL NO. LT-32.
LOW AMBIENT SWITCH (FAN CYCLING) FOR OPERATION DOWN TO 0°F. AMBIENT.
HIGH PRESSURE CONTROL
LOW PRESSURE CONTROL
UNIT SHALL ALSO COME COMPLETE WITH WINTER START-UP PACKAGE.

2.1 INSTALLATION

INSTALL AC SYSTEM IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL UNIT PLUMB, FIRMLY ANCHORED IN LOCATION INDICATED, AND MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES.

INSTALL AND CONNECT ELECTRICAL DEVICES FURNISHED BY THE MANUFACTURER BUT NOT SPECIFIED TO BE FACTORY MOUNTED. FURNISH COPY OF MANUFACTURER'S ELECTRICAL CONNECTION DIAGRAM SUBMITTAL TO THE ELECTRICAL CONTRACTOR. START-UP A/C UNIT IN ACCORDANCE WITH MANUFACTURER'S START-UP INSTRUCTIONS.

TEST CONTROLS AND DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS. UNIT SHALL BE FULLY CHARGED, TESTED AND READY FOR OPERATION.

REFRIGERANT PIPING-- INSTALLATION TO PROVIDE FOR EASE OF MAINTENANCE WITH ALL ACCESSORIES, SIGHT GLASS, FILTER DRIER CHARGING VALVE ETC. AS REQUIRED.

3.0 CONDENSATE PUMP UNIT

VERTICAL TYPE AUTOMATIC SELF CONTAINED PUMPING UNIT, LITTLE GIANT PUMP CO. (TECUMSEH PRODUCTS CO.) MODEL VCL-45S CAPACITY 75 GPM @ 40' HD.

ALARM POINTS

- 1. MAGNETIC ALARM DEVICE (INTRUDER)
- 2. SMOKE DETECTORS
- 3. POWER FAILURE
- 4. HI-LO TEMPERATURE

ALARMS AS INCLUDED IN OWNER FURNISHED EQUIPMENT.

ISSUED FOR CLIENT REVIEW		TJA	15 APR 97
REV	REVISION DESCRIPTION	BY	DATE
EI ASSOCIATES ARCHITECTURE • ENGINEERING • CONSTRUCTION 115 Evergreen Pl. • E. Orange, NJ 07018 • (201) 672-5100		ELECTRICAL CLIENT DWG. NO. _____ EIA PROJECT NO. EE4444 EIA DRAWING NO. E-2	
GAETANO P. CIPRIANO PROFESSIONAL ENGINEER CT. LICENSE NO. 15383		PROJECT NEXTEL COMMUNICATIONS SITE # CT-0066 16 TITICUS MOUNTAIN ROAD NEW FAIRFIELD, CT	
SCALE AS NOTED DRAWN BY: DESIGNED BY: CHECKED BY: APPROVED BY: PROJECT MANAGER:		TITLE PWR. PLAN, PNL. & LTG. FIXT. SCHEDULES AND GENERAL NOTES MECHANICAL LAYOUT AND SPECS. ISSUE DATE 8 APR 97 REVISION _____	

UNDERGROUND STORAGE TANK SCHEDULE

TANK CAPACITY GAL.	HIGHLAND TANK	BUFFALO TANK	NEW CONCRETE PAD DIMEN'S FOR SECTION (THIS DIM.) ONLY	STRAP LOCATION	STRAP VES-4 SIZE	ANCHOR BOLTS VES-4 AND SIZE	REMOTE FILL SIZE	VENT SIZE	DIRECT FILL
1 550	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
2 1000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
3 1500	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
4 2000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
5 2500	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
6 3000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
7 4000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
8 5000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
9 6000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
10 8000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
11 10000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
12 12000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
13 15000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"
14 20000	10'-9"	4'-11"	8'-0"	1'-0"	2-1/4"x3"	2-1/4"x3"	2"	2"	4"

PIPE SCHEDULE

RETURN LINE TYPE "K" SOFT DRAWN COPPER TUBING UP TO 7/8" O.D. SIZE. FIBERGLASS REINFORCED EPOXY PIPING 2" AND UP SIZE AS INDICATED ON SITE PLAN.

SUPPLY LINE UNDERGROUND - FIBERGLASS REINFORCED EPOXY PIPING. BLACK STEEL PIPE INSIDE PIPING CHAMBER.

FILL PIPING ABOVE GROUND - GALVANIZED STEEL PIPE WITH GALVANIZED MALLEABLE IRON FITTINGS. UNDERGROUND - FIBERGLASS REINFORCED EPOXY PIPING.

VENT PIPING INSIDE PIPING CHAMBER - BLACK STEEL FOR PROTECTION OF SOFT COPPER FUEL OIL SUPPLY AND RETURN LINES - SCHED. 40 PVC-SIZE 4" PIPE WITH LONG RADIUS ELBOWS.

CONDUIT PIPING CHAMBER (FACTORY INSTALLED ON TANK) FIELD FABRICATED DUPLEX TANK FITTINGS FOR FUEL LINES. SEE DETAIL 111 THIS DWG.

REMOTE FILL LINE (IF REQ'D) SEE SITE PLAN.

5" HALF COUPLING WITH 5/4" DIELECTRIC BUSHINGS (FACTORY INSTALLED IN PIPING CHAMBER) (TYP. FOR 6" ALL OPENINGS TO BE 10" ABOVE TOP OF TANK PLUS UNUSED OPENINGS WITH PVC PIPE PLUGS).

24" CUTOUT IN PIPING CHAMBER COVER WITH BOLTED LID.

ELECTRICAL CONDUIT (TYP. SCHED. 40 PVC WITH 2" X 1/2" CONTROL WIRES TO MONITORING UNIT IN BUILDING).

6" FLANGED NOZZLE FOR ADDITIONAL FOS 4" (IF REQ'D - SEE SITE PLAN).

TANK LEVEL TRANSMITTER

ALTERNATE LIFT LUG LOCATION ON 1000 GALLON TANKS.

4" PVC CONDUIT INSTALL UNDERGROUND FROM PIPING CHAMBER TO BUILDING AS SECONDARY CONTAINMENT AND PROTECTION OF FUEL OIL LINES.

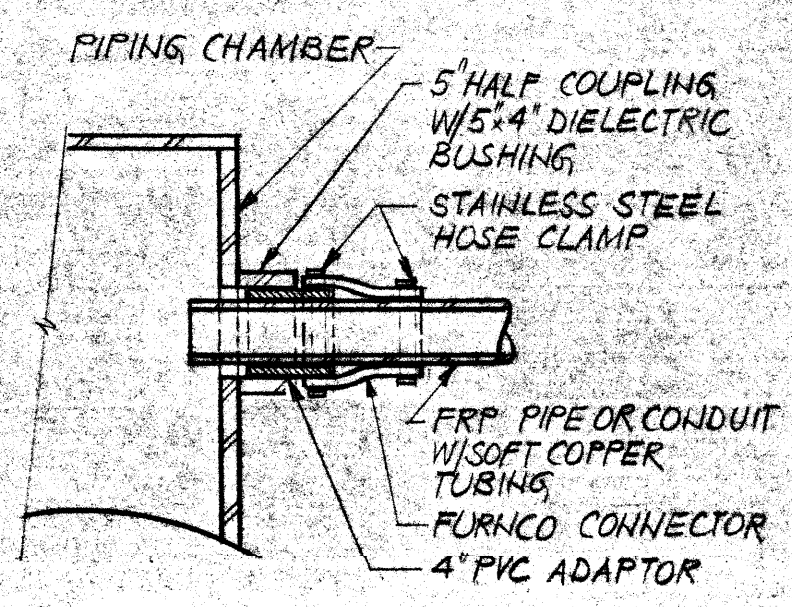
MINIMUM TANK SHELL THICKNESS

TANKS UP TO 4000 GALLONS - 7 GA
5000 - 10000 GALLONS - 14"
15000 - 20000 GALLONS - 5/16"

UNDERGROUND STORAGE TANK

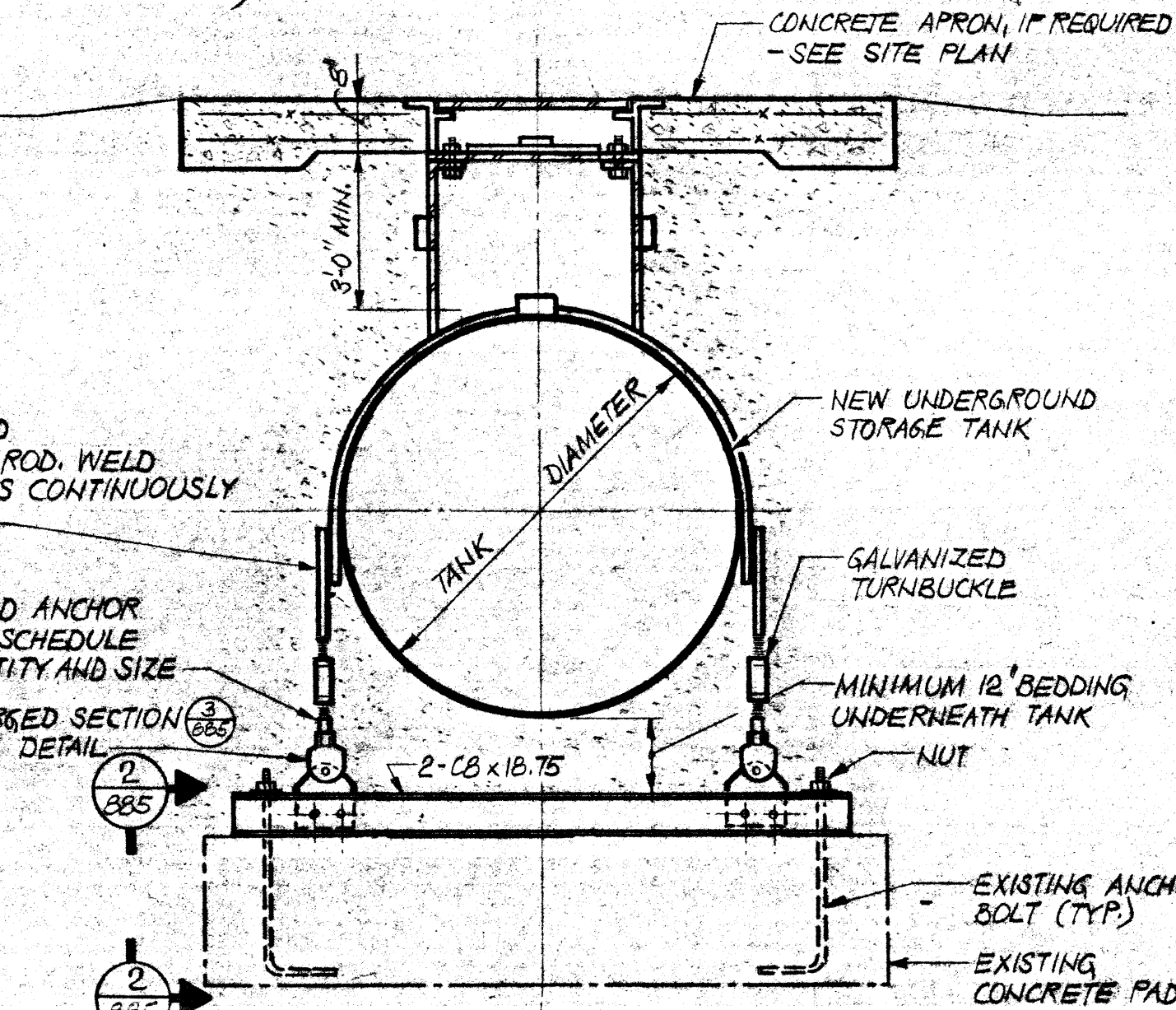
THE UNDERGROUND STORAGE TANK SHALL BE SINGLE WALL FABRICATED OF CARBON STEEL BY HIGHLAND, BUFFALO OR A LICENSED MEMBER OF THE STEEL TANK INSTITUTE. CONSTRUCTION AND FABRICATION OF THE TANK SHALL BE IN STRICT ACCORDANCE WITH UNDERWRITERS SUBJECT 58, USING FLAT STEEL HEADS. THE CORROSION CONTROL SYSTEM SHALL BE IN STRICT ACCORDANCE WITH STI-3 SPECIFICATIONS AS APPLIED BY A LICENSEE OF THE STEEL TANK INSTITUTE. THE STI-3 CORROSION SYSTEM SHALL INCLUDE:

- 1) LABELS: TANKS SHALL BEAR UNDERWRITERS LABEL AND STI-3 LABEL.
- 2) WARRANTY: LIMITED STI-3, 30 YEAR WARRANTY.
- 3) HOLD DOWN STRAPS: QUANTITY AND SIZE AS SPECIFIED ON THE UNDERGROUND STORAGE TANK SCHEDULE. HOLD DOWN STRAPS SHALL BE COATED WITH KOPPERS 50 BITUMASTIC COATING. HOLD DOWN STRAPS SHALL BE COMPLETE WITH TURNBUCKLES AND NEOPRENE INSULATORS. THE TANK MANUFACTURER SHALL GUARANTEE THE HOLD DOWN STRAPS, HARDWARE AND FACTORY WELDING WILL RESTRAIN AN EMPTY TANK SUBMERGED IN A FLOODED EXCAVATION WITH A SAFETY FACTOR OF 2.0.
- 4) PIPE CONTAINMENT CHAMBER: AS DESCRIBED ON THE CONTRACT DRAWINGS.
- 5) TANK EXTERIOR COATING: POLYURETHANE COATING.
- 6) PIPE CONTAINMENT CHAMBER COATING: POLYURETHANE COATING INSIDE CORROSION PROTECTION SYSTEM: DIELECTRIC BUSHINGS, IMPRICAL ANODES, SANDBLASTING, AND APPLICATION OF POLYURETHANE COATING, UL 451-3 LABELS.



NEW CONCRETE ANCHOR PAD REINFORCEMENT SCHEDULE	
PAD THICKNESS, SEE UNDER GROUND TANK SCHEDULE	REINFORCEMENT T43 EA. WAY
1'-0" TO 1'-2"	#4 @ 12"
1'-3" TO 2'-0"	#5 @ 12"
2'-1" TO 2'-4"	#5 @ 8"
3'-0" TO 3'-6"	#6 @ 6"

PIPE PENETRATION AT PIPING CHAMBER



SECTION 1B

FOR NEW TANK ANCHORED TO AN EXISTING CONCRETE PAD WHERE EXISTING TANK DIAMETER EXCEEDS NEW TANK BY MORE THAN 12" (NOT TO SCALE)

TANK LEVEL INDICATING SYSTEM

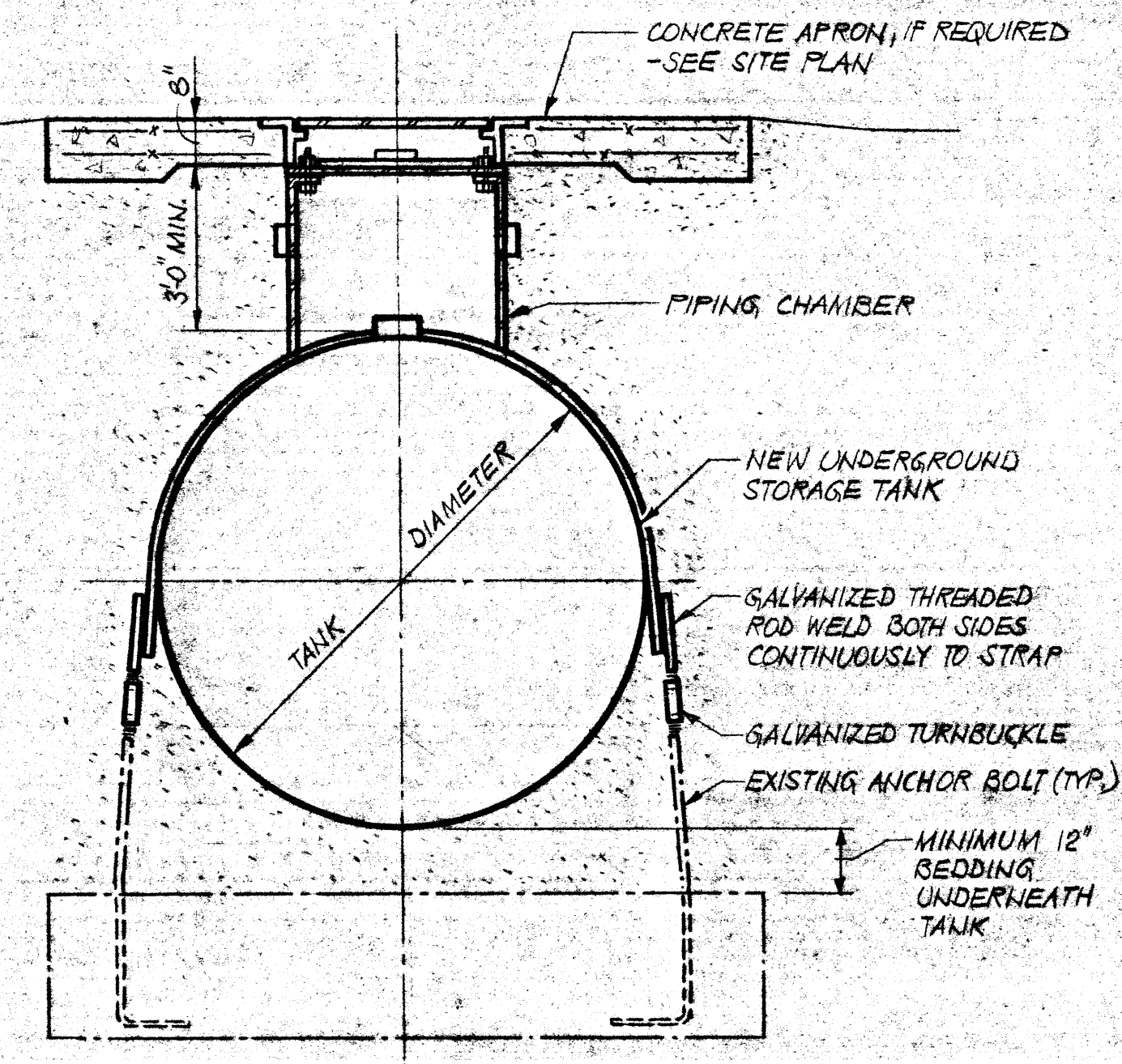
THE TANK LEVEL INDICATING SYSTEM SHALL BE ELECTRIC AS MANUFACTURED BY PNEUMATORATOR OR AS APPROVED. THE INDICATOR SHALL BE MODEL NUMBER E-29 COMPLETE WITH FOUR AUXILIARY CONTACTS FOR ALARM AND FUNCTION CONTROL. THE DIAL SHALL BE CALIBRATED IN GALLONS. THE TRANSMITTER SHALL BE OF THE DIRECT LIFT MAGNETIC FLOAT TYPE, MODEL N° 2-412.

OVERFILL ALARM

THE OVERFILL ALARM SHALL BE AS MANUFACTURED BY PNEUMATORATOR. THE LEVEL ALARM CONSOLE SHALL BE MODEL N° C-15A HIGH LEVEL ALARM. THE UNIT SHALL BE COMPLETE WITH RED WARNING LIGHT HORN AND RESET SWITCH. THE RESET SWITCH SHALL SILENCE AND RESET THE ALARM HORN. A ONE MINUTE TIME DELAY SHALL AUTOMATICALLY SILENCE AND RESET THE HORN.

INSTALLATION NOTES

- 1) EXCAVATION:
 - a) GENERAL - THE EXCAVATION SHOULD BE KEPT DE-WATERED. ALL BACKFILL MATERIAL SHALL BE CLEAN SAND, FREE OF STONES. INSTALLATION SHALL BE APPROVED BY THE AT&T REPRESENTATIVE PRIOR TO BACKFILLING. ALL OSHA REQUIREMENTS SHALL BE FOLLOWED.
 - b) IN UNSTABLE SOILS, THE MINIMUM BOTTOM WIDTH OF THE EXCAVATION SHALL BE 1.5 TIMES THE DIAMETER OF THE TANK.

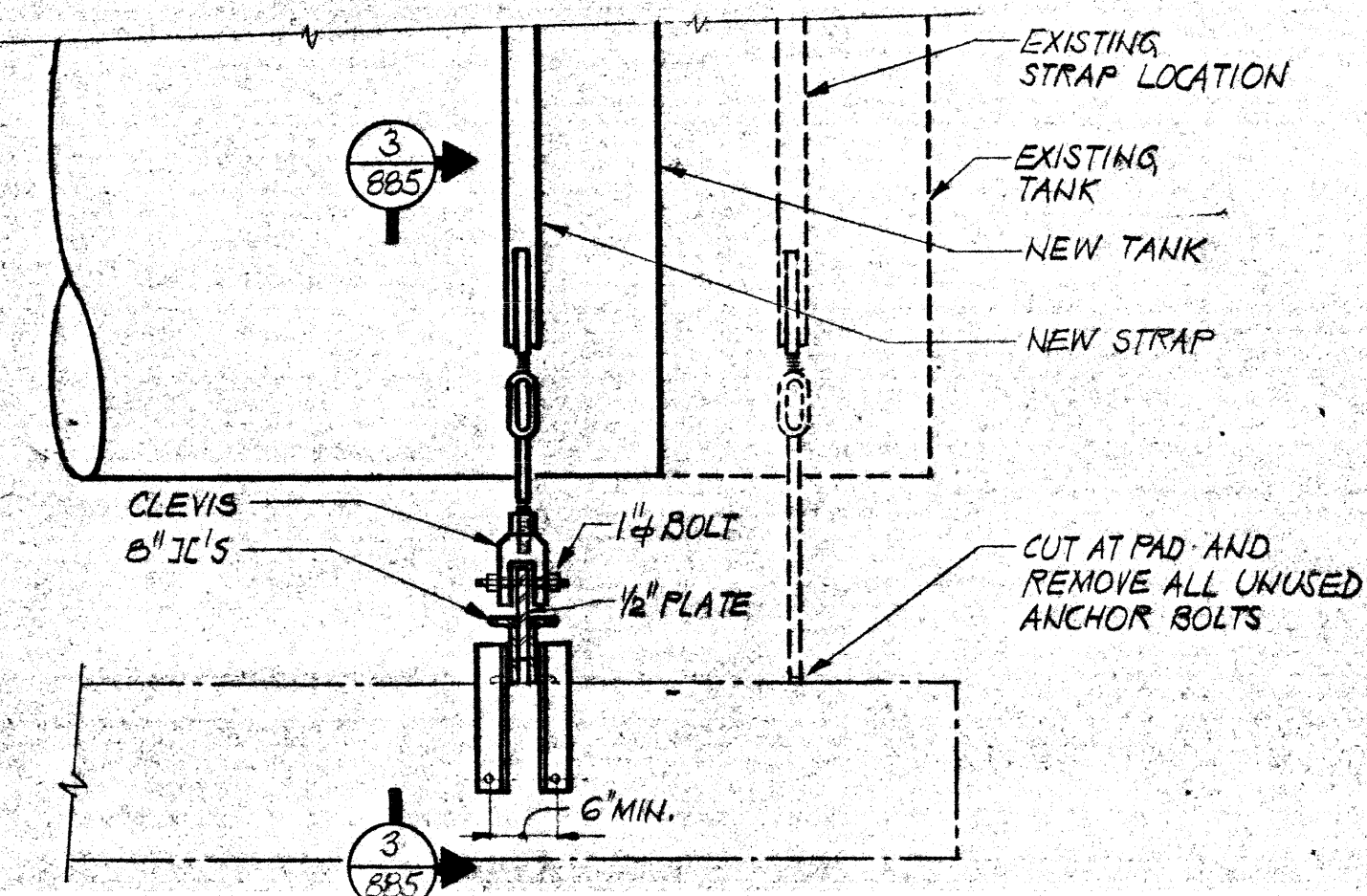


SECTION 1A

FOR NEW TANK ANCHORED TO AN EXISTING CONCRETE PAD WHERE THE EXISTING TANK DIAMETER IS THE SAME AS THE NEW TANK OR IS LARGER BY UP TO 12" (NOT TO SCALE)

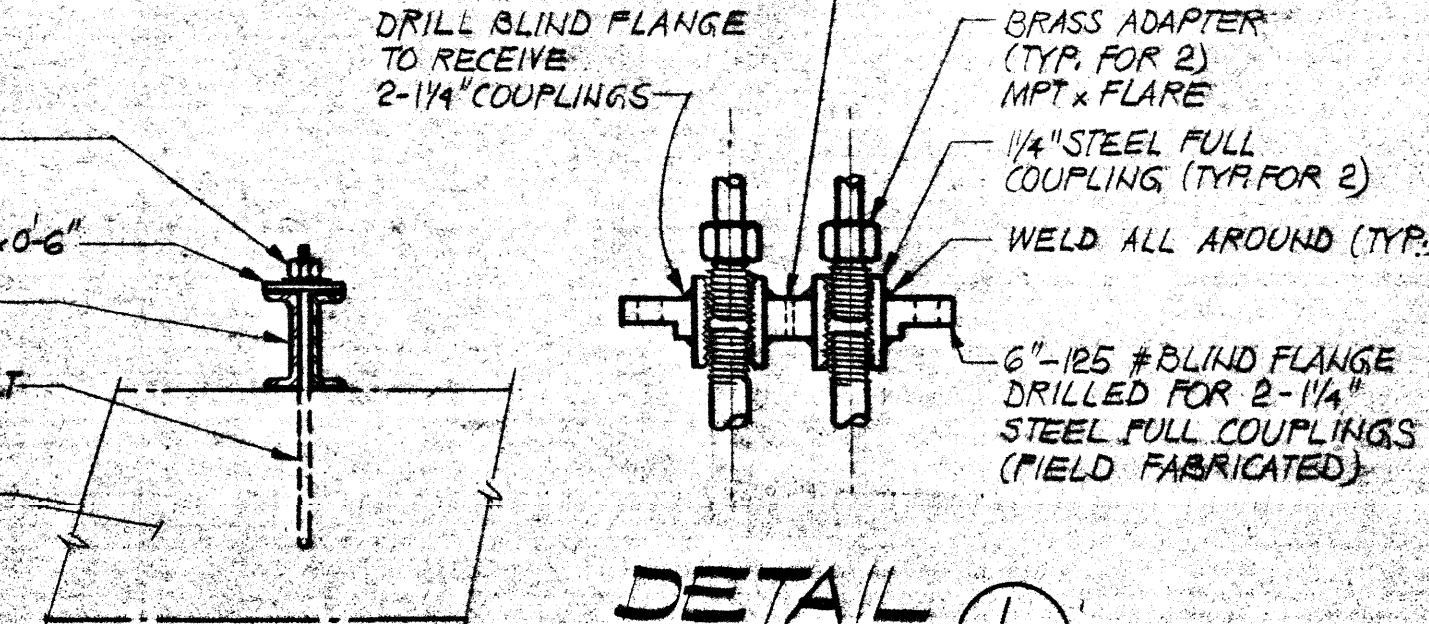
(INSTALLATION NOTES CONTINUE)

- 2) BEDDING AND BACKFILL MATERIAL SHALL BE CLEAN SAND UNLESS A-20. IN TIDAL AREAS BACKFILL MATERIAL SHALL BE FEA GRAVEL. AFTER TANK IS LEVELLED AND ANCHORED, BACKFILL SHALL BE HAND SHOVELED UNDER TANK AND TAMPED TO 95% COMPACTION TO ENSURE THAT THE TANK IS FULLY AND EVENLY SUPPORTED. ONCE THE FIRST BACKFILL LIFT HAS BEEN PROPERLY PLACED, SUCCESSIVE 18 INCH LIFTS SHALL BE SIMILARLY INSTALLED UP TO THE SUB-GRADE LEVEL FOR THE SLAB.
- 3) UNDERGROUND STEEL ANCHORING SYSTEM - PAINT/COAT ALL STEEL CLAMPS, BOLTS ETC. IF TANK ANCHOR SYSTEM W/ H.D. BITUMASTIC BEFORE BACKFILLING.
- 4) PIPING MATERIAL:
 - a) GENERAL PIPING MATERIAL SHALL BE AS INDICATED IN THE PIPE SCHEDULE. ALL THREADED JOINTS SHALL BE SEALED WITH TEFLON BASED SEALING COMPOUND.
 - b) COPPER TUBING FOR UNDERGROUND USE SHALL BE INSTALLED WITHOUT JOINTS INSIDE A 4" PVC CONDUIT. THE CONDUIT SHALL BE INSTALLED FROM THE TANK PIPING CHAMBER TO THE BUILDING.
 - c) FITTINGS FOR SOFT COPPER TUBING SHALL BE CAST BRONZE FLARE FITTINGS.
 - d) VENT PIPE - THE VENT PIPE SHALL BE GROUNDED TO THE MAIN OFFICE GROUND, WITH A CLAMP AND #2 SOLID BARE COPPER WIRE.
 - e) THE ENDS OF ALL CONDUITS AND SLEEVES SHALL BE CHECKED WITH 3 INCHES DIA. W/ 1/2" WATER-TIGHT WITH WATER PLUG SEALING COMPOUND.
 - f) THE PIPING SYSTEM SHALL BE CHECKED FOR LEAKS BY PRESSURIZING THE PIPING UNDER 50 PSI PRESSURE AND SOAKING ALL JOINTS. NOTE: THE PIPING MUST BE DISCONNECTED FROM THE TANK PRIOR TO PERFORMING THIS TEST.
 - g) CONTRACTOR SHALL PROVIDE BUSHINGS AS REQUIRED TO ADAPT THE 4" TANK TAPPIINGS TO THE REQUIRED SIZE PIPING.
 - h) FIBERGLASS REINFORCED EPOXY PIPE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS.
- 5) CONCRETE ANCHOR PAD/APRON:
 - a) IF A NEW TANK AND NEW PAD ARE TO BE INSTALLED, REFER TO SECTION 1A THIS DWG.
 - b) IF A NEW TANK DIAMETER OR SMALLER BY UP TO 12" OF EXIST TANK DIAMETER, IS TO BE INSTALLED ON AN EXISTING PAD, REFER TO SECTION 1A THIS DWG.
 - c) IF A NEW TANK MORE THAN 12" SMALLER IN DIAMETER, THAN EXISTING TANK IS USED, REFER TO SECTION 1B THIS DWG.
 - d) CONCRETE SHALL BE OF NATURAL AGGREGATES AND SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
 - e) REINFORCING TO CONFORM TO ASTM A 615, GRADE 60.
 - f) CONCRETE PAD SHALL BE SET ON UNDISTURBED MATERIAL.
 - g) CONCRETE SHALL BE AIR ENTRAINMENT 5 TO 7% USING AN AIR ENTRAINING ADMIXTURE.
 - h) WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185.
- 6) SYSTEM TEST - THE ENTIRE FUEL OIL SYSTEM - TANK + PIPING SHALL BE PRESSURIZED WITH 5 PSI AIR PRESSURE. ALL JOINTS SHALL BE CHECKED FOR LEAKS WITH SOAP.



ELEVATION 'B'

STRAP ANCHORING DETAIL, NEW TANK SHORTER THAN EXISTING INSTALLED ON EXISTING PAD (NOT TO SCALE)

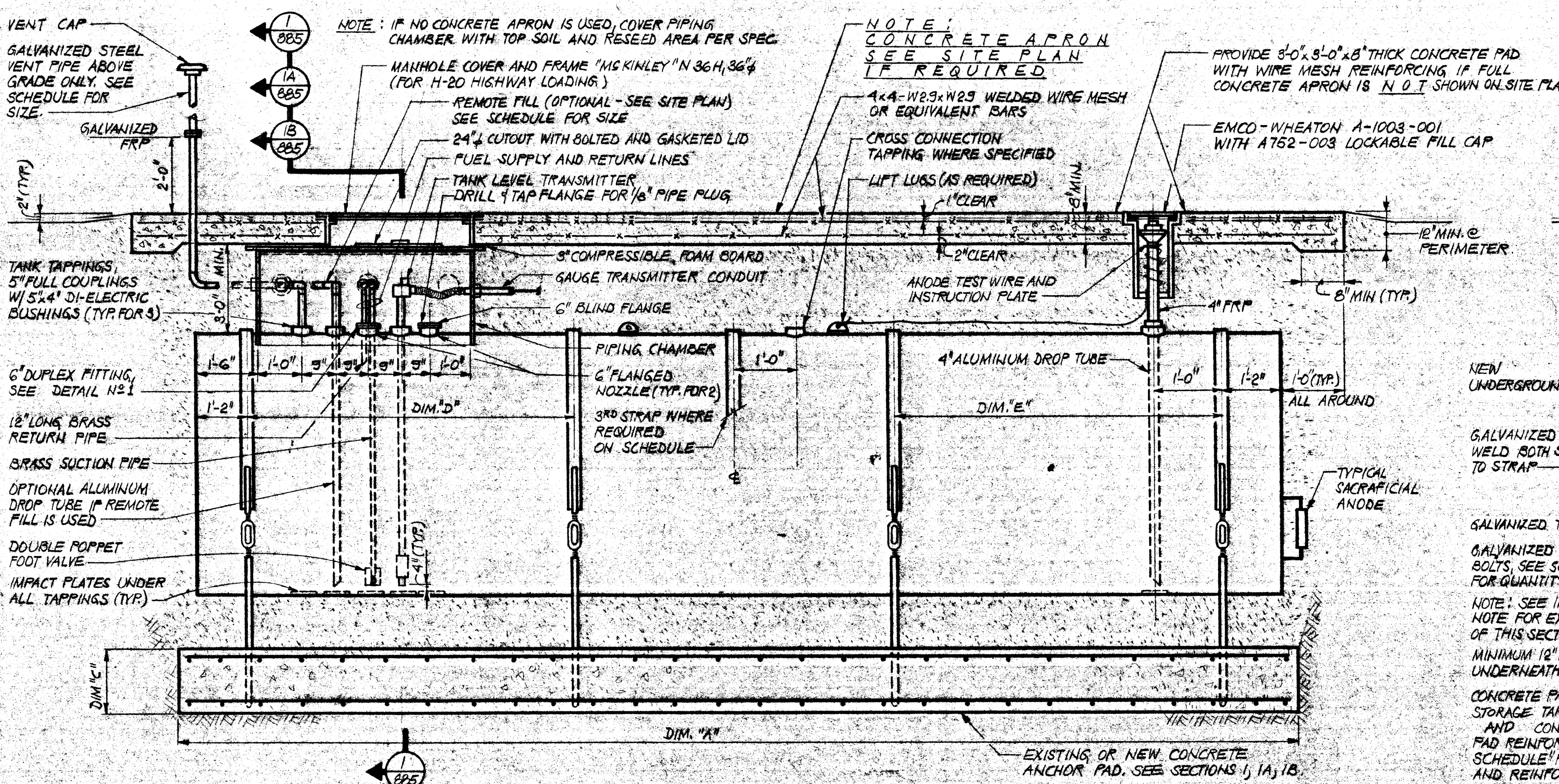


SECTION 2

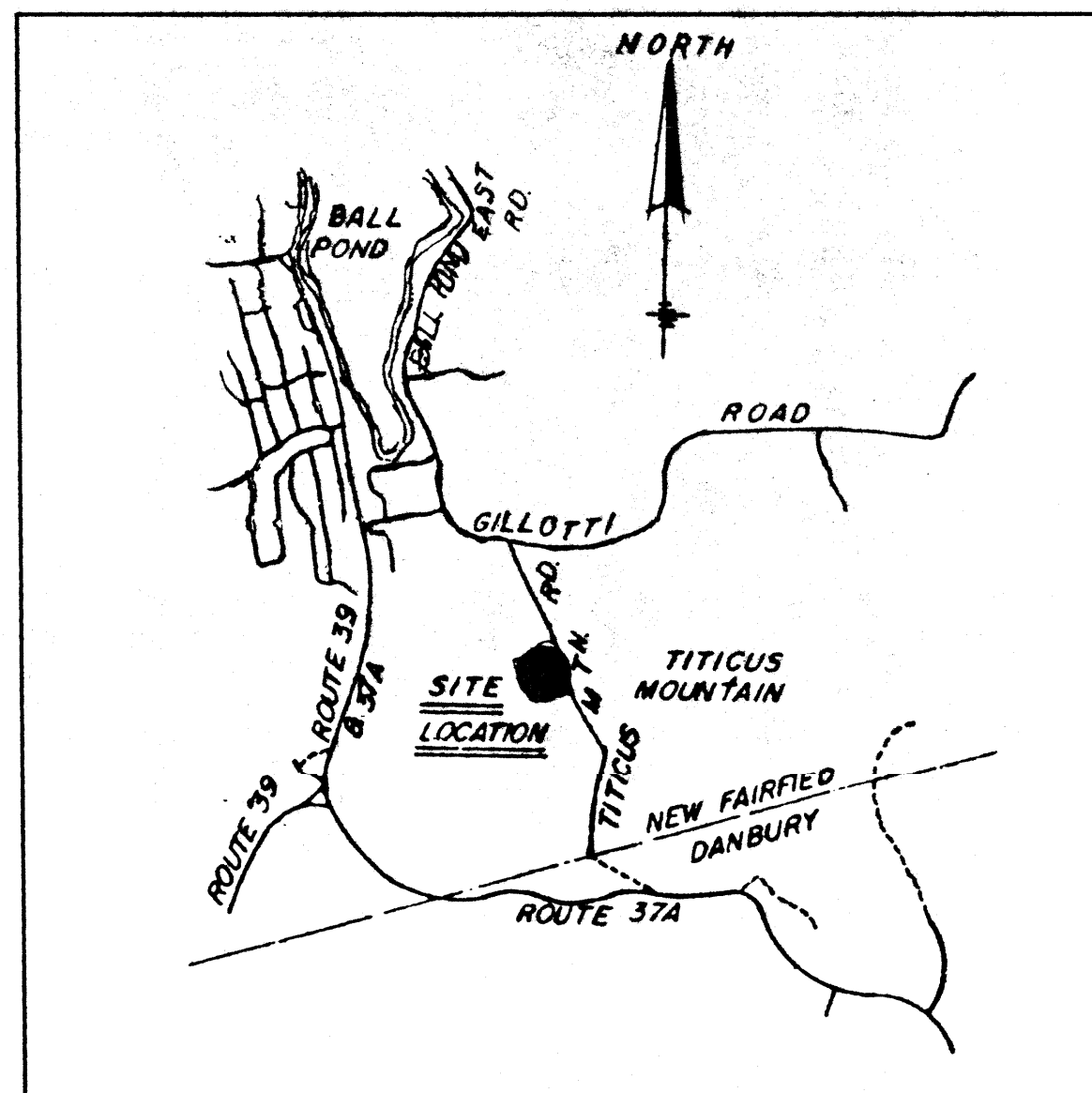
(NOT TO SCALE)

DETAIL 1

DUPLEX TANK FITTING (NOT TO SCALE)



VICINITY MAP



SITE MAP

NEXTEL COMMUNICATIONS

One North Broadway, 2nd Floor
White Plains, NY 10601

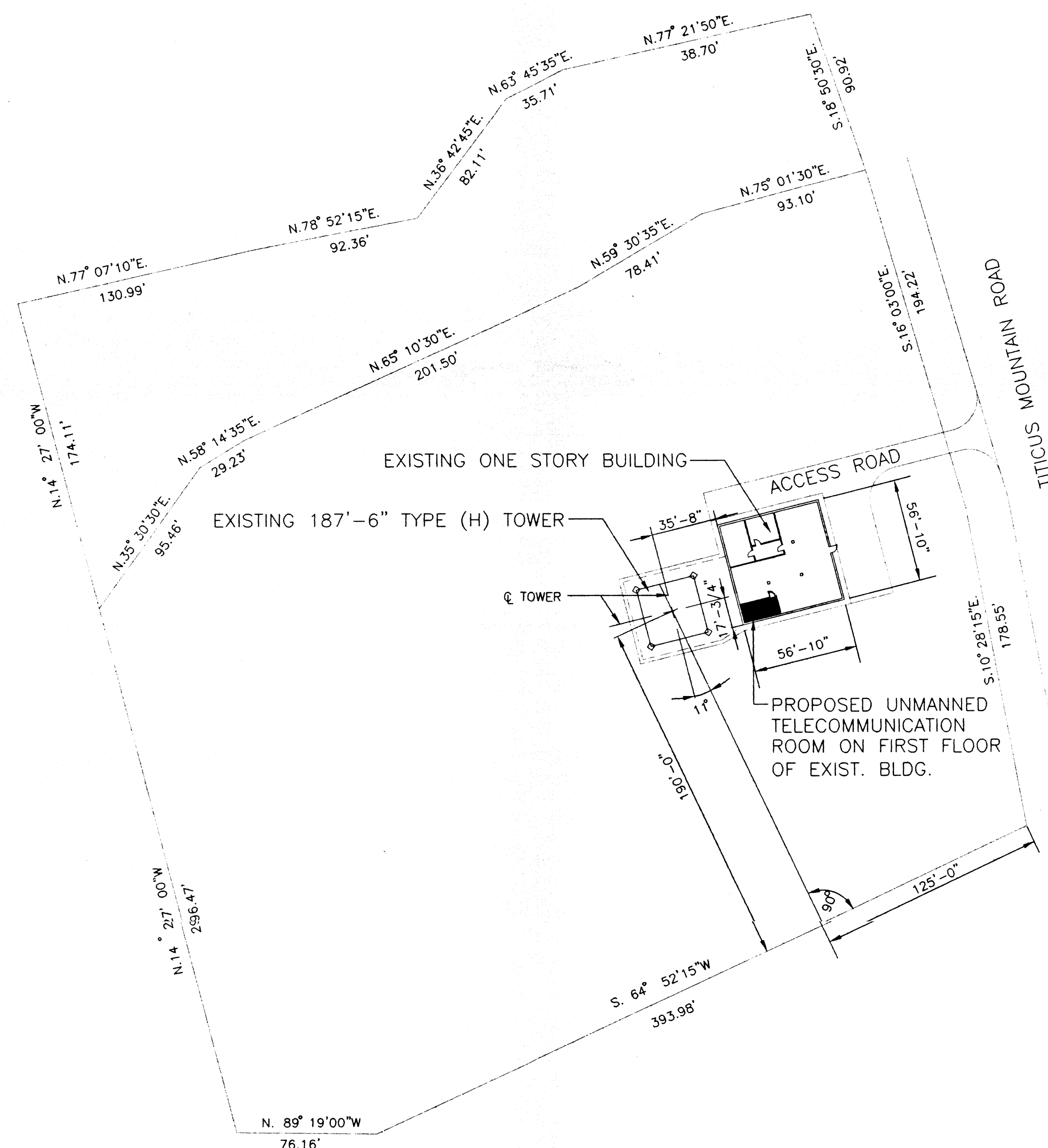
UNMANNED WIRELESS COMMUNICATIONS SITE

Site No. CT-0066 — NEW FAIRFIELD

16 TITICUS MOUNTAIN ROAD, NEW FAIRFIELD, CT

SITE LOCATION PLAN

SCALE: 1" = 50'-0"



SITE INFORMATION/CODE ANALYSIS

LATITUDE: 73° 30' 56"
LONGITUDE: 41° 27' 04"

TOWN OF NEW FAIRFIELD
BLOCK: 2
LOT: 7.3
ZONE: R-88
LOCATION: 16 TITICUS MOUNTAIN ROAD
NEW FAIRFIELD CT

OWNER: AT&T
268 WOLCOTT RD.
WOLCOTT, CT. 06716
ATTN: MR. THOMAS C. FORD

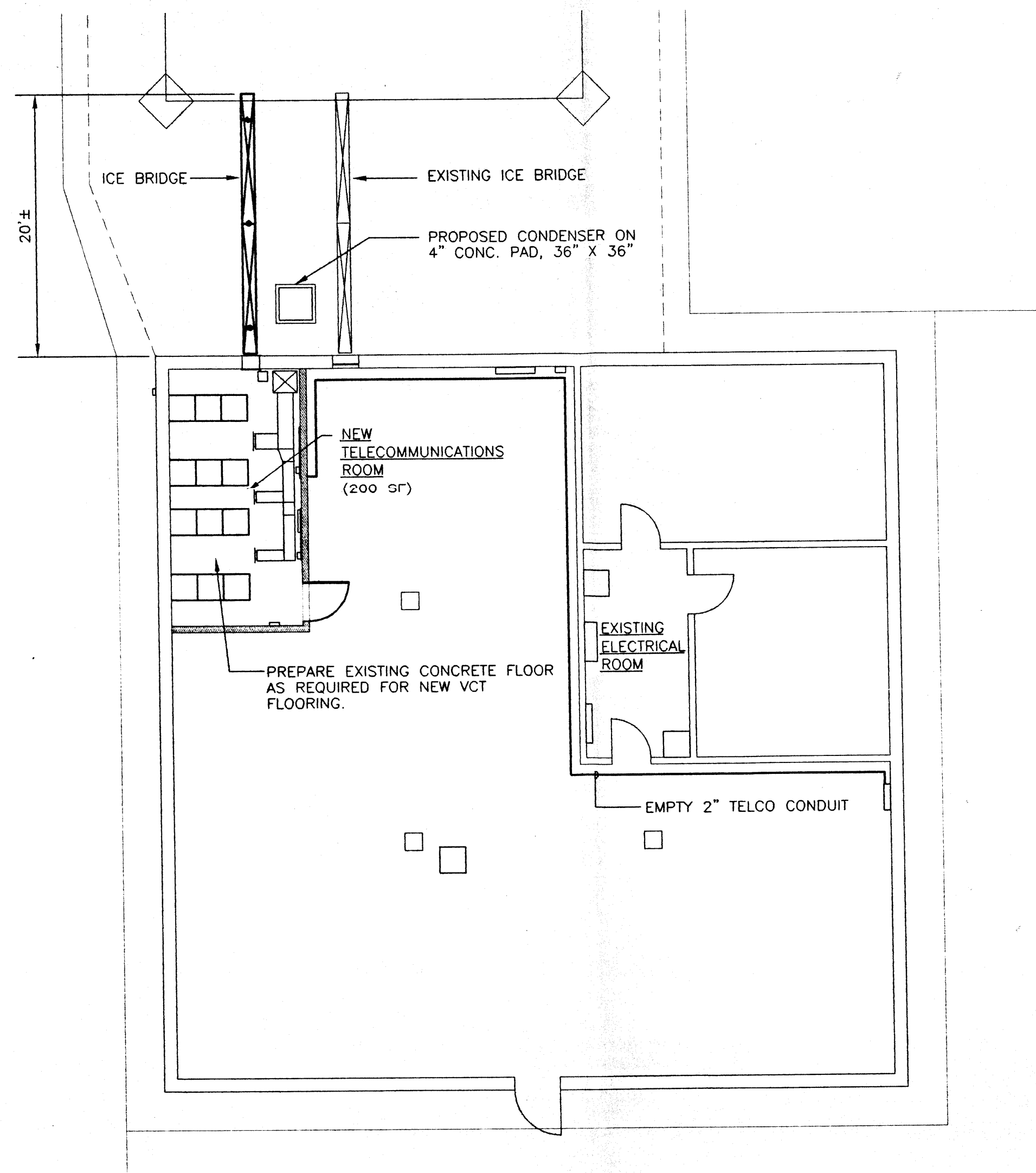
HEIGHT OF EXISTING BUILDING: 1 STORY
EXISTING BUILDING FOOTPRINT: APPROX. 3230 SQ.FT.
EX. BLDG. OCCUPANCY GROUP: B (BUSINESS),
TELEPHONE EQUIPMENT SHELTER
EX. BLDG. CONSTRUCTION CLASSIFICATION: 1A
BUILDING IS NOT SPRINKLERED

PROPOSED CELL SITE OCCUPANCY GROUP: B
ASSUMED CONSTRUCTION CLASSIFICATION: 2C
2HR FIRE SEPARATION BETWEEN NEXTEL EQUIPMENT ROOM
AND REMAINING AREA OF BUILDING
AREA OF NEW WIRELESS COMMUNICATION ROOM: 200 SQ. FT.
NEW WIRELESS COMMUNICATION ROOM TO BE UNOCCUPIED
LOCATION OF NEW WIRELESS COMM. ROOM: GRADE LEVEL

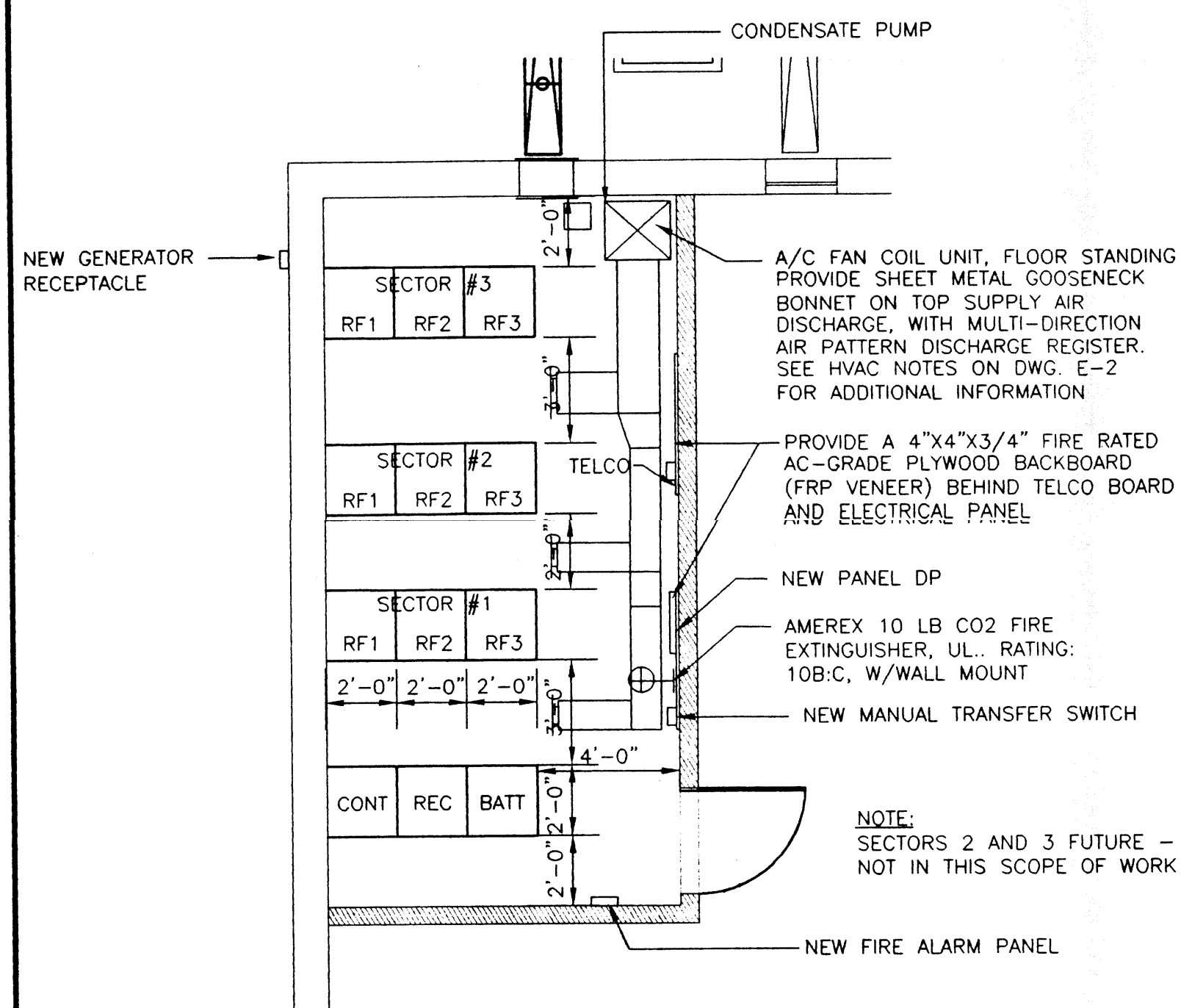
LIST OF DRAWINGS

DRAWING No.	DESCRIPTION
T-1	COVER SHEET
A-1	PLANS AND DETAILS
A-2	ELEVATION AND DETAILS
A-3	GENERAL NOTES & SPECIFICATIONS
E-1	FLOOR, REFLECTED CEILING AND GROUNDING PLANS & DETAILS
E-2	LIGHTING PLAN, PANELBOARD SCHEDULES AND GENERAL NOTES, MECHANICAL LAYOUT & SPECIFICATIONS

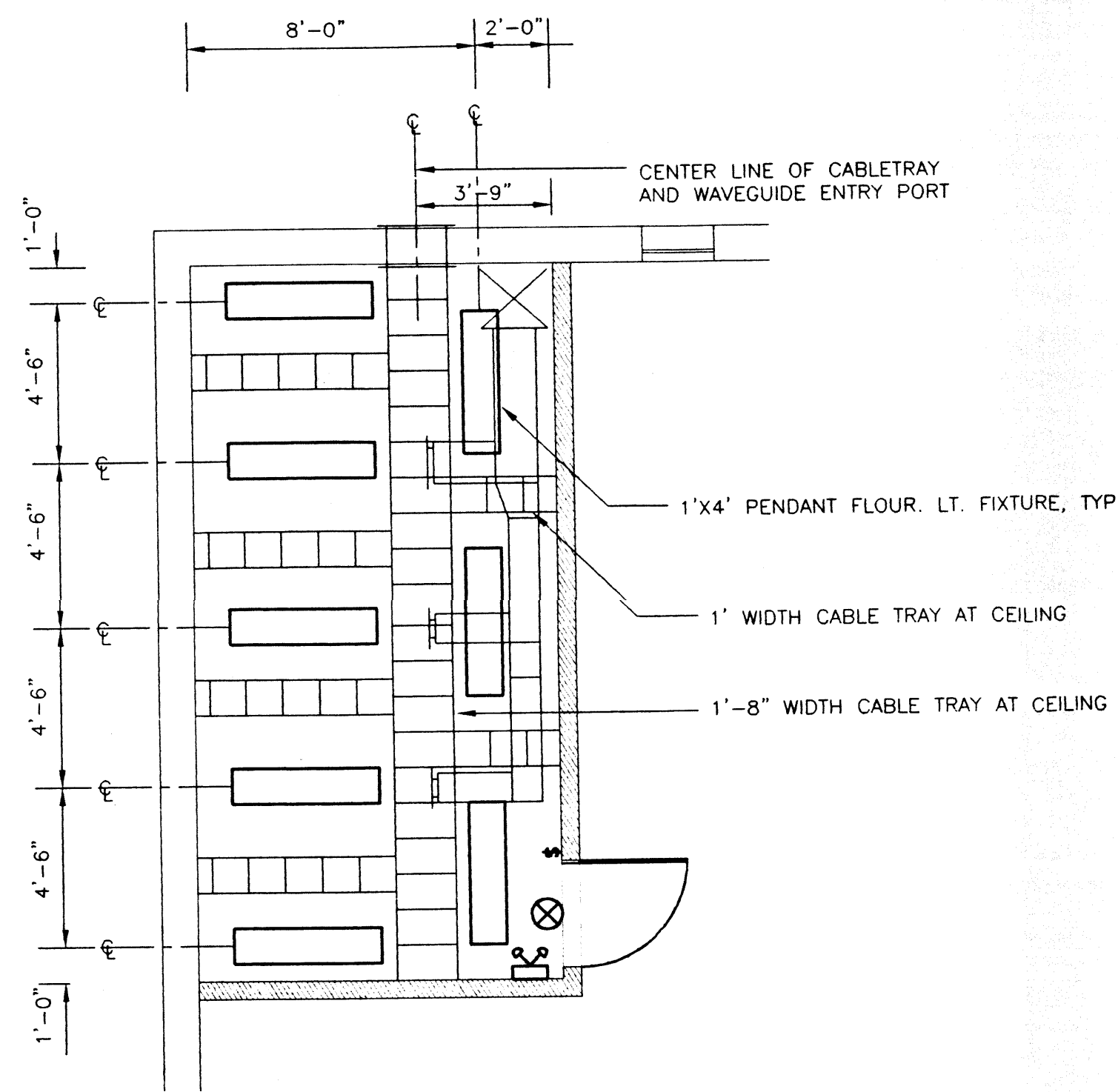
1	ISSUED FOR CLIENT REVIEW	TJA	15 APR 97
REV	REVISION DESCRIPTION	BY	DATE
<div><div>EI</div><div>EI ASSOCIATES ARCHITECTURE • ENGINEERING • CONSTRUCTION 115 Evergreen Pl. • E. Orange, NJ 07018 • (201) 672-5100</div></div>			
GAETANO P. CIPRIANO		PROFESSIONAL ENGINEER CT. LICENSE NO. 15383	
ARCHITECTURAL		CLIENT DWG. NO. -----	
SCALE AS NOTED		PROJECT NEXTEL COMMUNICATIONS SITE # CT-0066 16 TITICUS MOUNTAIN ROAD NEW FAIRFIELD, CT	
DRAWN BY: J.K. ME 97		EIA PROJECT NO. EE4444	
DESIGNED BY: J.K. ME 97		EIA DRAWING NO. T-1	
CHECKED BY: J.K. ME 97		ISSUE DATE: 15 APR 97	
APPROVED BY: J.K. ME 97		REVISION: —	
PROJECT MANAGER: J.K. ME 97		TITLE COVER SHEET	



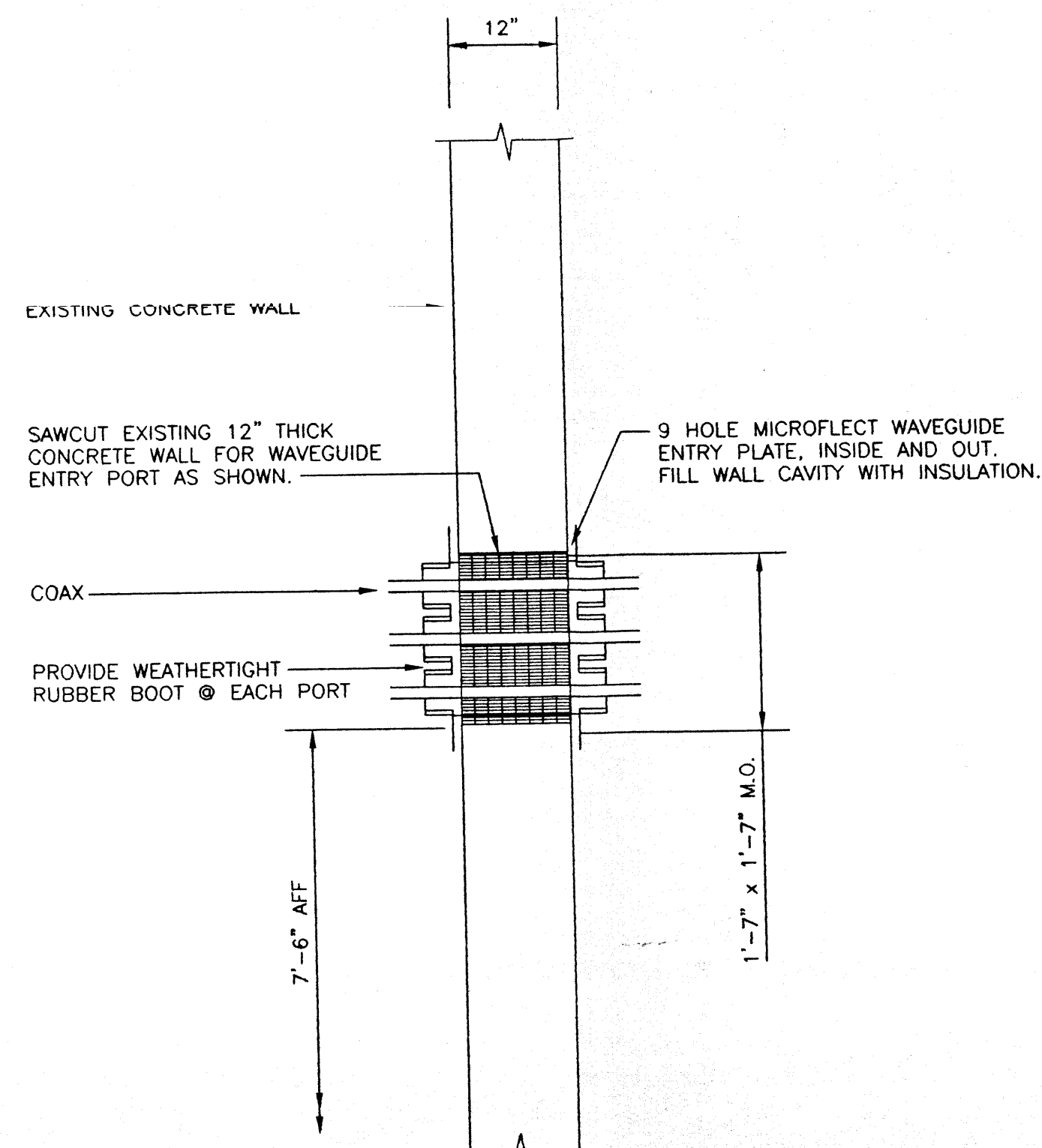
A FIRST FLOOR KEY PLAN
SCALE 1/8" = 1'-0"



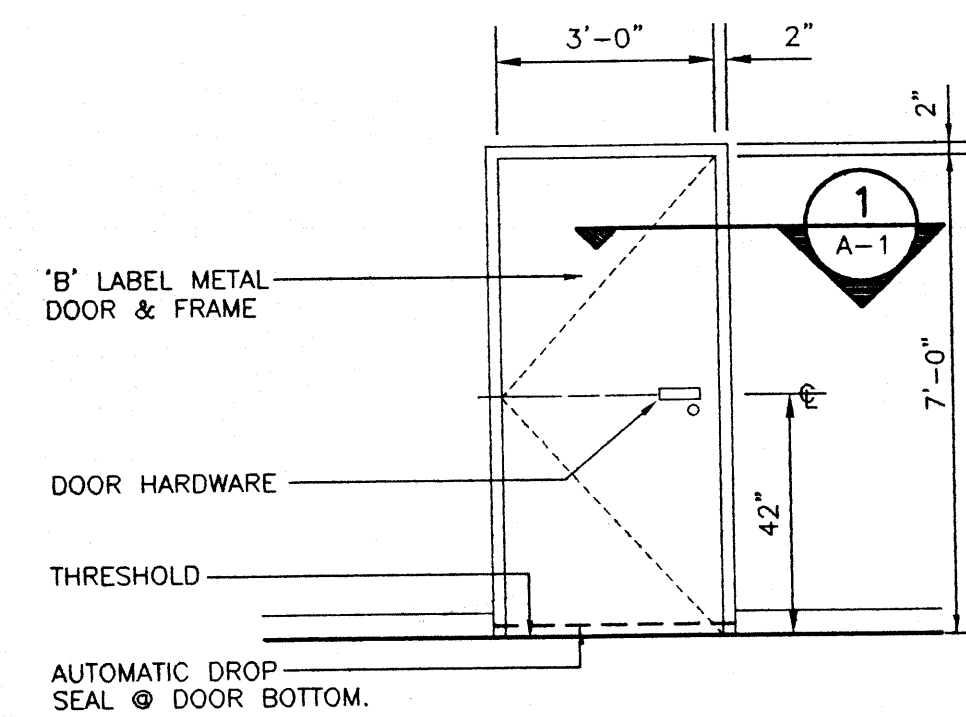
B EQUIPMENT PLAN
SCALE 1/4" = 1'-0"



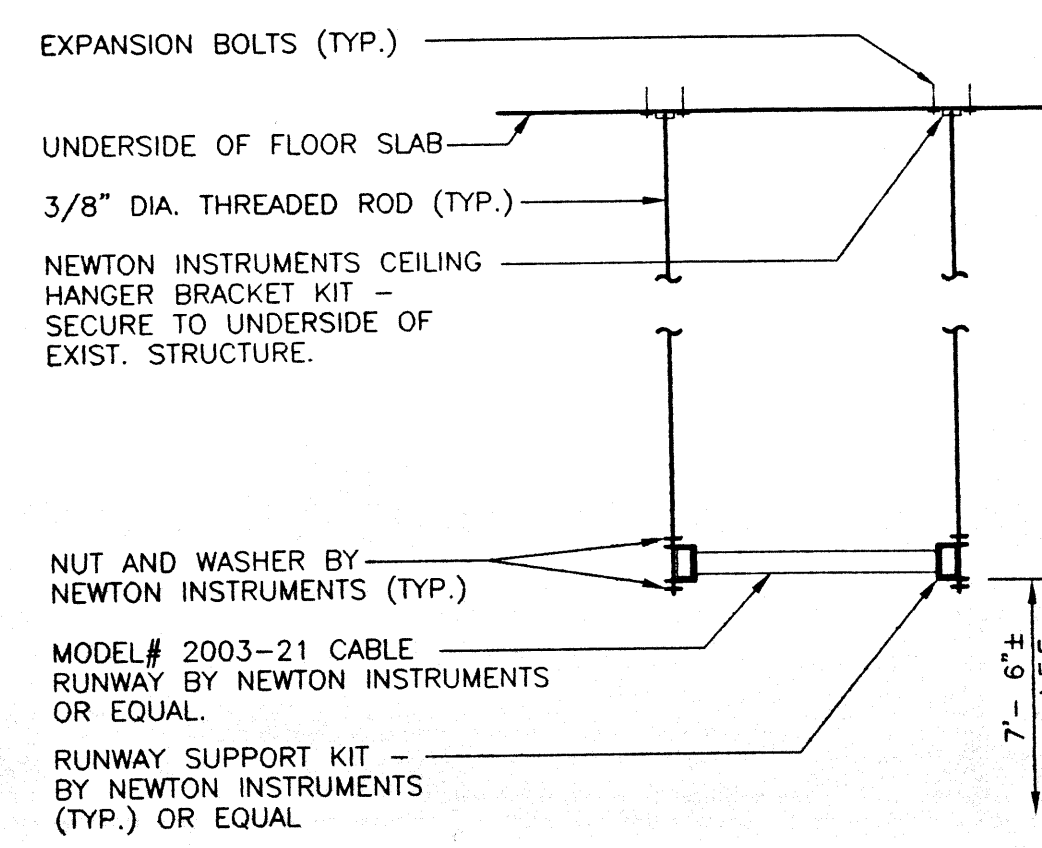
C REFLECTED CEILING PLAN
SCALE 1/4" = 1'-0"



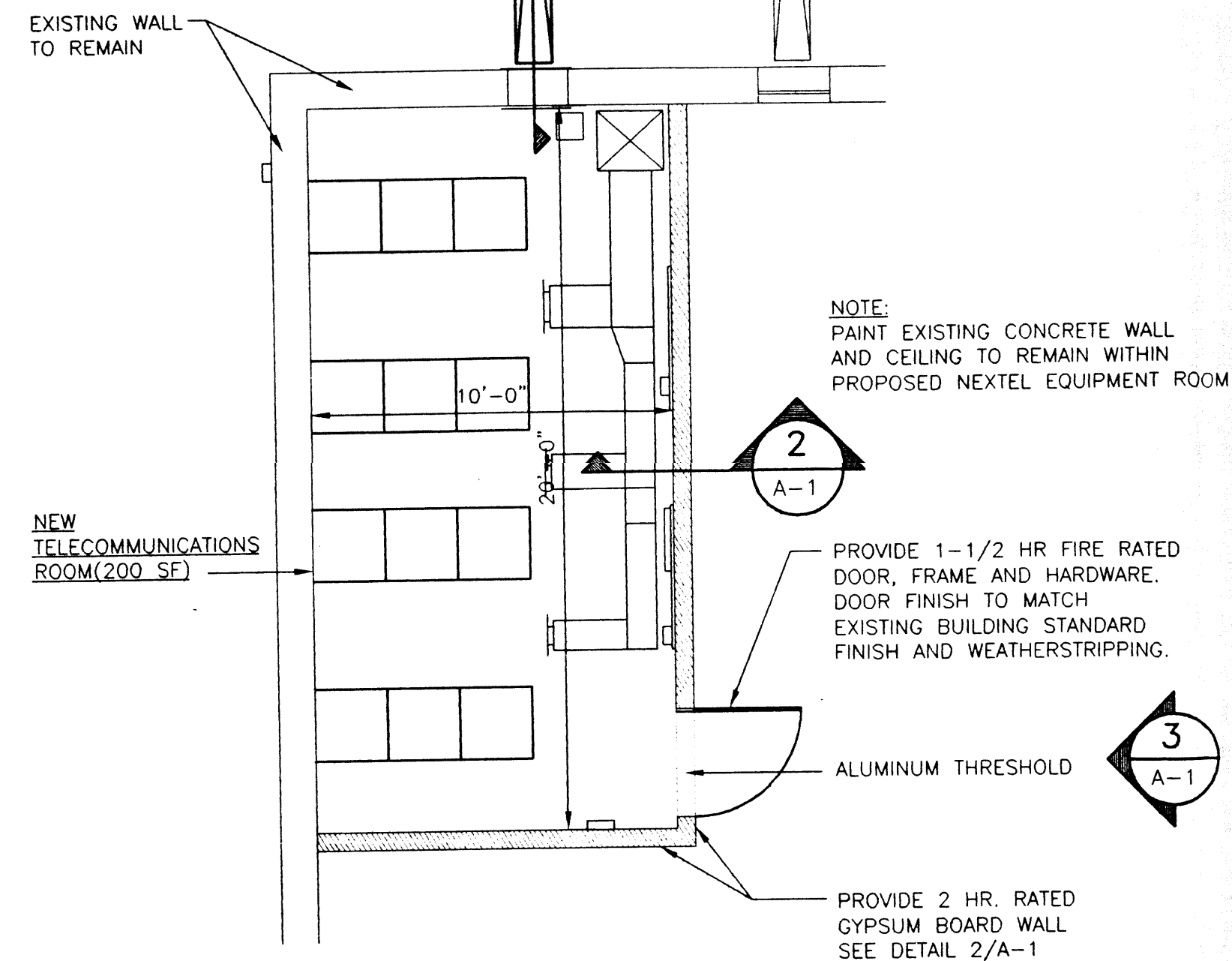
5 MICROFLECT DETAIL
3/4" = 1'-0"



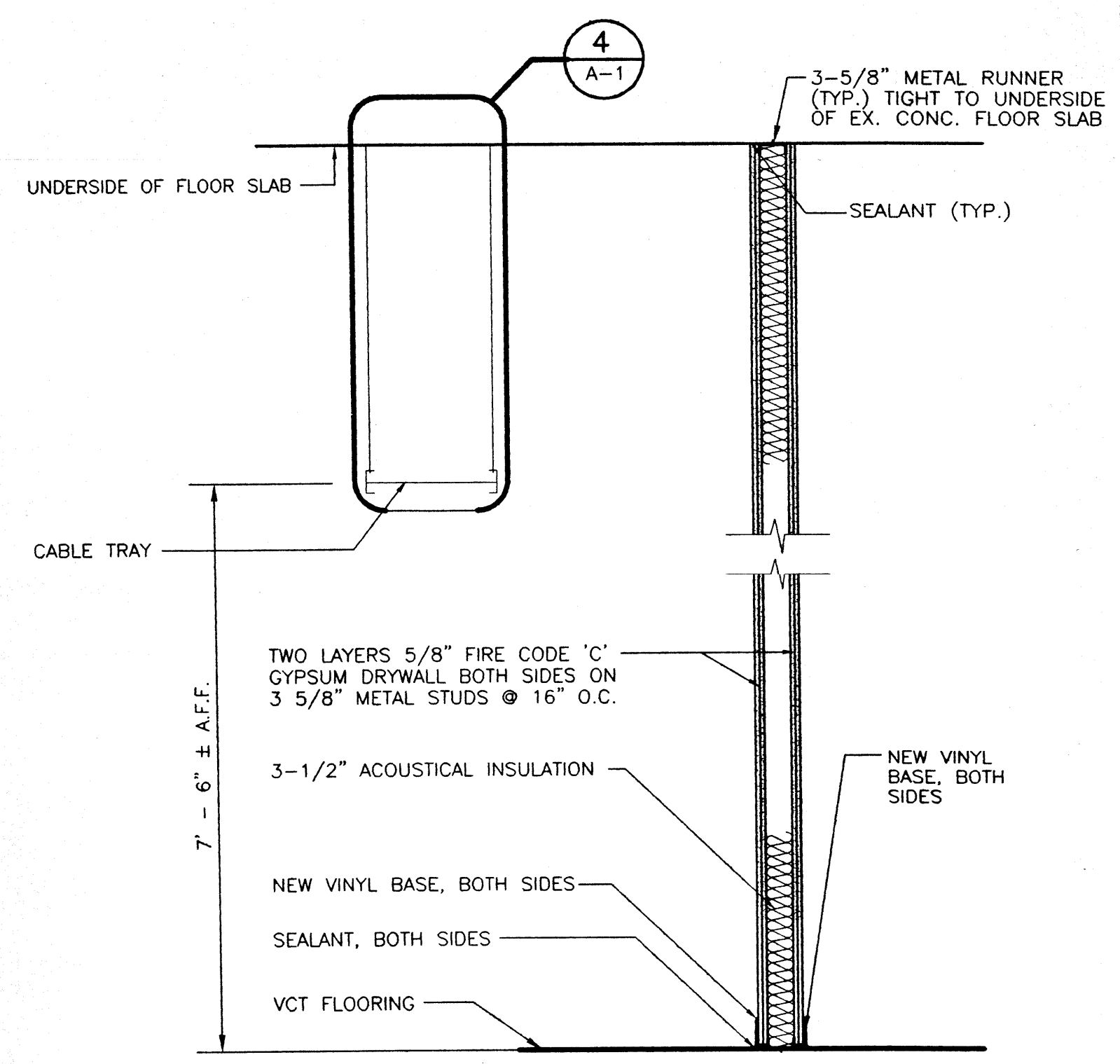
3 DOOR ELEV.
SCALE 3/8" = 1'-0"



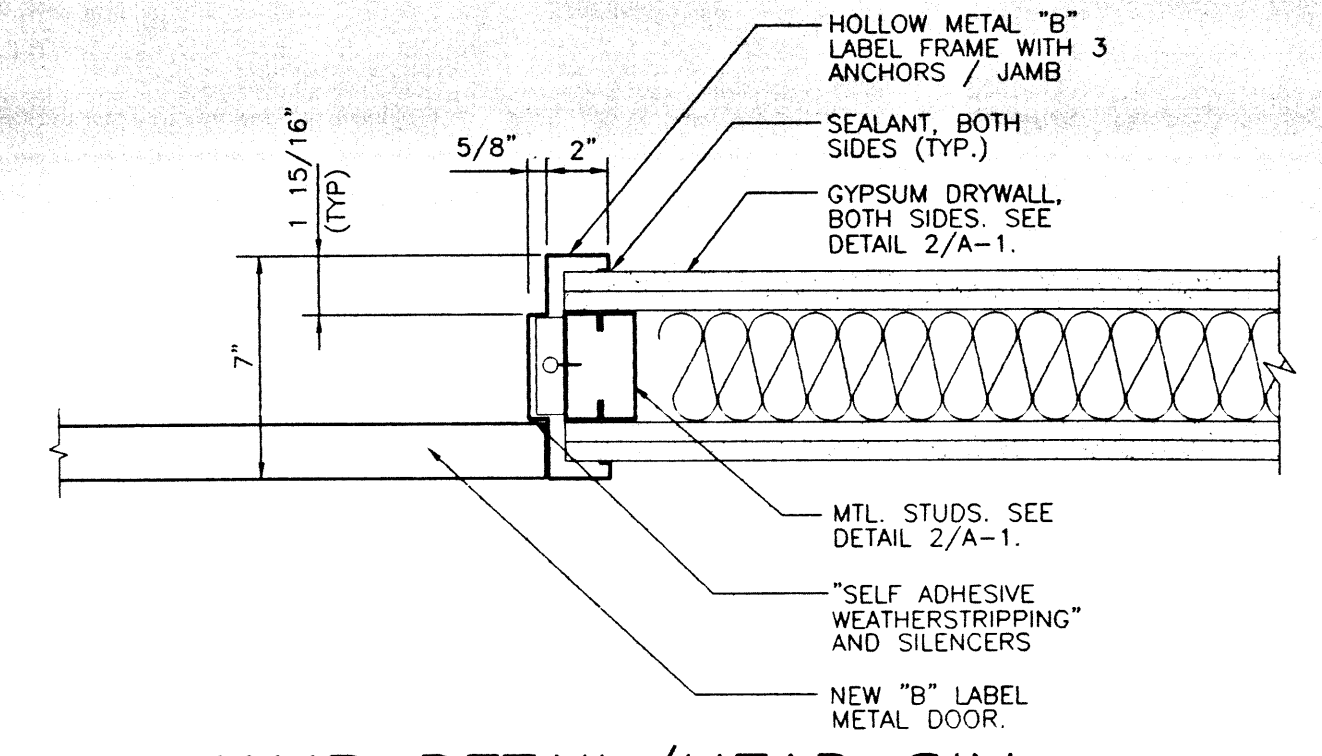
4 INTERIOR TRAY DTL.
N.T.S.



D FLOOR PLAN
SCALE 2" = 1'-0"



2 NEW GYP. BD. WALL PARTITION
(2 HR. RATED)
U.L. DESIGNATION: U495
SCALE 3/4" = 1'-0"

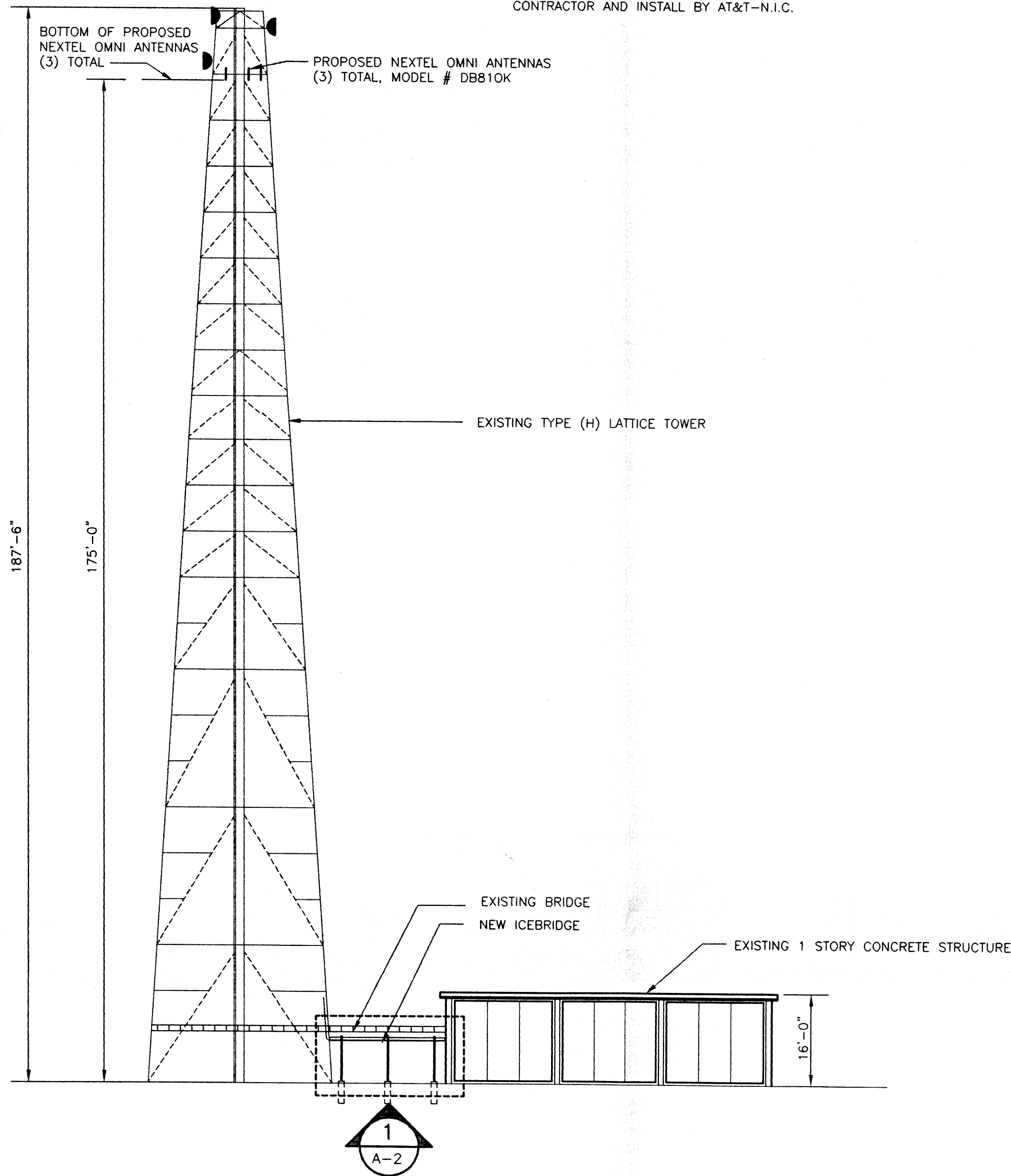


1 JAMB DETAIL/HEAD SIM.
SCALE 2" = 1'-0"

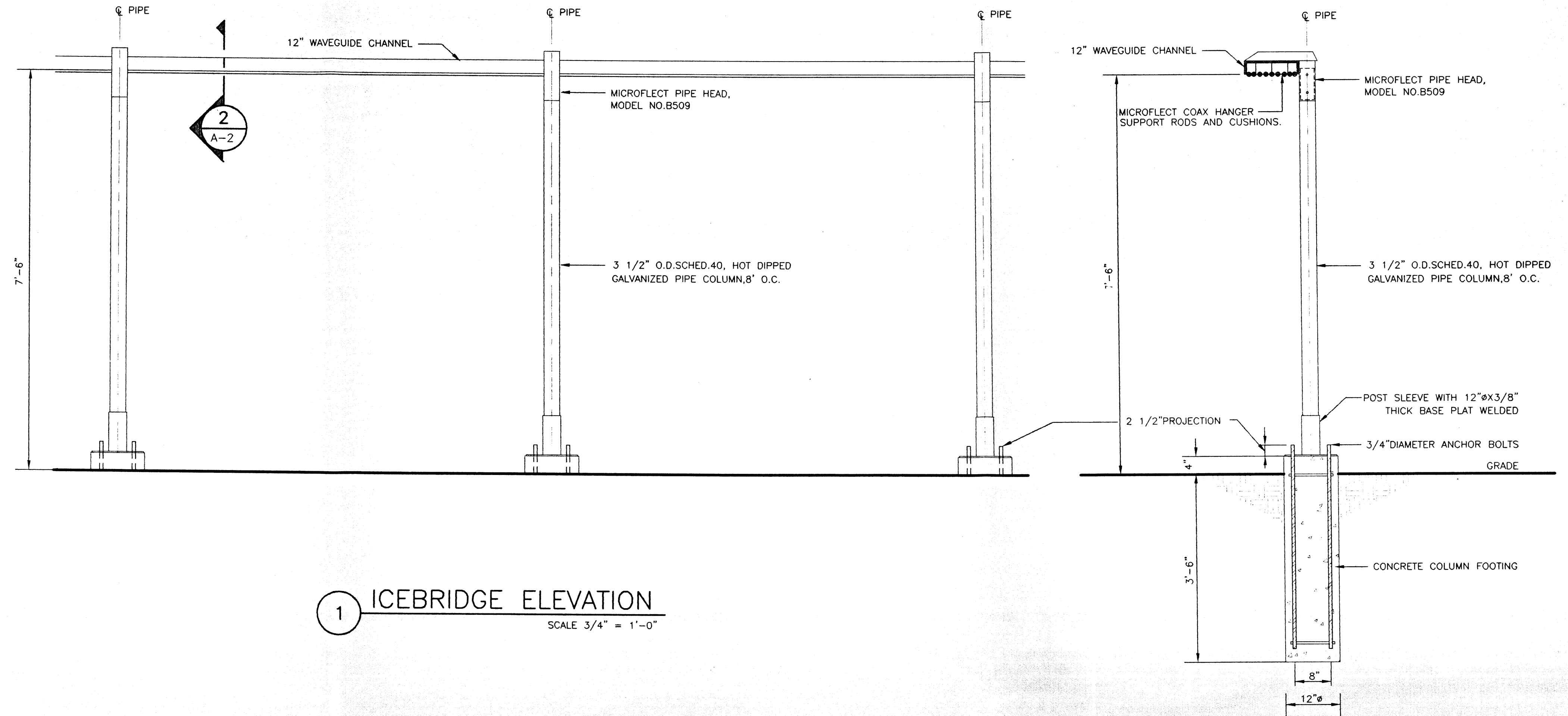
1	ISSUED FOR CLIENT REVIEW	TJA	15 APR 97
REV	REVISION DESCRIPTION	BY	DATE
EI ASSOCIATES ARCHITECTURE • ENGINEERING • CONSTRUCTION 115 Evergreen Pl. • E. Orange, NJ 07018 • (201) 672-5100			
GAETANO P. CIPRIANO		PROFESSIONAL ENGINEER	ARCHITECTURAL
		CT. LICENSE NO. 15383	CLIENT DWG. NO.
SCALE AS NOTED		PROJECT	EIA PROJECT NO.
DRAWN BY: LK		NEXTEL COMMUNICATIONS	
DESIGNED BY: LK		SITE # CT-0066	
CHECKED BY: LK		16 TITICUS MOUNTAIN ROAD	
APPROVED BY: LK		NEW FAIRFIELD, CT	
PROJECT MANAGER: LK		TITLE	
		PLANS & DETAILS	
		ISSUE DATE	15 APR 97
		REVISION	

A-1

NOTE :
ANTENNA LOCATIONS AND SECTOR ORIENTATION
TO BE DETERMINED IN THE FIELD BY THE
CONTRACTOR AND INSTALL BY AT&T-N.I.C.

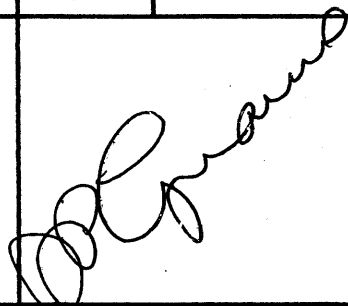


A SOUTH ELEVATION
SCALE 1/16" = 1'-0"



1 ICEBRIDGE ELEVATION
SCALE 3/4" = 1'-0"

2 SECTION
SCALE 3/4" = 1'-0"

1	ISSUED FOR CLIENT REVIEW		TJA	15 APR 97
REV	REVISION DESCRIPTION		BY	DATE
<div><div>EI</div><div>EI ASSOCIATES ARCHITECTURE • ENGINEERING • CONSTRUCTION 115 Evergreen Pl. • E. Orange, NJ 07018 • (201) 672-5100</div></div>				
GAETANO P. CIPRIANO			PROFESSIONAL ENGINEER CT. LICENSE NO. 15383	ARCHITECTURAL CLIENT DWG. NO. -----
SCALE AS NOTED		PROJECT	EIA PROJECT NO. EE4444	
DRAWN BY: <div>LJA APR 97</div>		NEXTEL COMMUNICATIONS		EIA DRAWING NO. A-2
DESIGNED BY: <div>TJA APR 97</div>		SITE # CT-0066		
CHECKED BY: <div>LJA APR 97</div>		16 TITICUS MOUNTAIN ROAD		
APPROVED BY: <div>LJA APR 97</div>		NEW FAIRFIELD, CT		
PROJECT MANAGER: <div>LJA APR 97</div>		TITLE		ISSUE DATE 15 APR 97
		ELEVATION AND DETAILS		REVISION —

ARCHITECTURAL

01000 - GENERAL NOTES

- ALL WORK SHALL COMPLY WITH RULES AND REGULATIONS OF ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION.
- ALL DIMENSIONS SHALL BE VERIFIED AT THE JOB BY THE CONTRACTOR AND EACH SUB-CONTRACTOR. OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
- PATCH ALL EXISTING WORK, TO REMAIN, TO MATCH ADJACENT CONDITIONS EQUAL TO EXISTING WORK.
- IN GENERAL, NEW MATERIALS AND MATERIALS FOR REPAIR CONDITIONS SHALL MATCH SIMILAR ITEMS IN QUALITY, DETAIL, PROFILE AND FINISH AS THOSE ALREADY BUILT INTO WORK.
- CONTRACTOR SHALL REFER QUESTIONS ON MATERIALS, FINISHES, LABOR AND/OR PERFORMANCE STANDARDS NOT SPECIFIED HEREIN TO NEXTEL.
- DAMAGED UTILITIES AND IMPROVEMENTS SHALL BE REPAIRED WITH NO ADDITIONAL COST TO OWNER AND TO NEXTEL'S SATISFACTION.
- ALL CONTRACTORS TO PROVIDE ALL SAFETY MEASURES REQUIRED TO PROVIDE A SECURE SITE DURING PROTECTION OF LIFE AND PROPERTY ARE TO BE MAINTAINED.
- REFER TO SPECIFICATION FOR ADDITIONAL INFORMATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITH ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID.
- CONTRACTOR SHALL COORDINATE HIS WORK WITH NEXTEL SO THAT THERE IS NO INTERFERENCE WITH OWNER'S PERSONNEL OR WORK SCHEDULE.
- ANY CONFLICTS WITH NEW CONSTRUCTION AND EXISTING CONDITIONS OR EQUIPMENT, ETC. ARE TO BE BROUGHT TO THE ATTENTION OF NEXTEL PRIOR TO PROCEEDING WITH THE WORK.

02110 - GENERAL DEMOLITION NOTES

- PROVIDE ALL NECESSARY DEMOLITION FOR ALTERATION AS INDICATED ON THIS AND OTHER APPLICABLE DRAWINGS, AND AS MAY OTHERWISE BE NEEDED.
- PROVIDE AND MAINTAIN ALL TEMPORARY BRACING REQUIRED TO AVOID COLLAPSE AND PREVENT DAMAGE DURING CONSTRUCTION.
- COORDINATE ALL DEMOLITION AND CONSTRUCTION WORK WITH OTHER TRADES.
- CONTRACTOR SHALL PROTECT ALL EXISTING ROOMS AND WORK AREA FROM CONSTRUCTION DIRT AND DUST, WATER AND ALL OTHER TYPES OF DAMAGES DUE TO DEMOLITION AND CONSTRUCTION PROCESSES.
- EXISTING DOORS AND CABINETS WHICH ARE TO BE REMOVED ARE TO BE TAKEN TO THE STORAGE UNIT AS DIRECTED BY THE OWNER.

02115 - CUTTING AND PATCHING

- GENERAL
 - DOCUMENTS

WORK INCLUDED UNDER THIS SECTION IS SUBJECT TO THE AGREEMENT, GENERAL CONDITIONS AND CONTRACT DRAWINGS, ALL OF WHICH ARE HEREBY MADE A PART OF THIS SECTION.
 - SCOPE

PROVIDE ALL MATERIALS, LABOR AND SUPERVISION, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE WORK OF THIS SECTION INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:

 - MASONRY
 - WORK AS INDICATED ON THE DRAWINGS & SPECIFICATIONS.
- MATERIALS
 - MATERIALS FOR REPLACEMENT, REPAIRING, PATCHING, RESTORATION, & SIMILAR WORK SHALL CONFORM TO APPLICABLE SPECIFICATIONS FOR NEW MATERIALS OR WORK. WHERE MATERIALS AND/OR INSTALLATIONS ARE NOT COVERED BY THE SPECIFICATIONS, SUCH MATERIALS SHALL MATCH EXISTING TO THE GREATEST EXTENT POSSIBLE. ALL EXCESS MATERIALS RESULTING FROM CUTTING & REMOVAL WORK SHALL BE REMOVED FROM THE JOB SITE IN AN APPROVED MANNER.

III. EXECUTION

- PREPARATION

PRIOR TO CUTTING OR UNCOVERING WORK, PROVIDE ALL SHORING, BRACING & SUPPORTS AS REQUIRED TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE PROJECT. PRIOR TO RESTORING WORK, PROPERLY PREPARE EXISTING SURFACES TO RECEIVE NEW MATERIALS SUCH AS TO PROVIDE A PROPER BOND OR JOINING. TEMPORARY PROTECTION FROM WIND AND STORM DAMAGE SHALL BE PROVIDED WHENEVER OPENINGS ARE CUT IN EXTERIOR OF BUILDING.
- CUTTING AND DRILLING

CONTRACTOR SHALL REMOVE ALL MATERIAL DESIGNATED FOR REMOVAL AS NECESSARY FOR INSTALLATION OF THE NEW WORK. CUTTING SHALL BE PERFORMED BY HAND OR SMALL POWER TOOLS. HOLES AND SLOTS CUT NEAT AND TO SIZE REQUIRED, WITH MINIMUM DISTURBANCE OF ADJACENT WORK. OPENINGS SHALL BE COVERED TEMPORARILY WHEN NOT IN USE AND PATCHED AS SOON AS WORK IS INSTALLED. THE USE OF GAS FIRED, AND/OR DIESEL EQUIPMENT WILL NOT BE PERMITTED. THE USE OF ELECTRICAL EQUIPMENT WILL BE PERMITTED ONLY WITH THE PRIOR APPROVAL OF THE OWNER.
- PATCHING AND REPAIRS

EXISTING WORK SHALL BE CUT, ALTERED, REMOVED, TEMPORARILY REMOVED AND REPAIRED AS REQUIRED FOR THE WORK. COORDINATE ALL PATCHING AND REPAIR WORK BEFORE BEGINNING WORK. ALTERATION WORK WILL REQUIRE REPAIRING AND REFINISHING OF EXISTING WORK. THE MATERIALS AND METHODS OF APPLICATION FOR NEW WORK AND FOR RESTORING OR REFINISHING EXISTING WORK SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE SPECIFICATIONS EXCEPT THAT MATERIALS AND WORKMANSHIP NOT COVERED IN THE COMPLETED WORK SHALL CONFORM TO SIMILAR MATERIALS AND WORKMANSHIP EXISTING OR ADJACENT TO THE SPACE IN WHICH ALTERATIONS ARE TO BE MADE.

05000 - METALS

ANTENNA SUPPORT STEEL

- UNLESS OTHERWISE NOTED:
 - ALL SHIMS, SHAPES AND PLATES SHALL CONFORM TO ASTM A36.
 - ALL PIPES SHALL BE ASTM A53, TYPE E OR S, GRADE B (Fy=35 KSI).
- GALVANIZING
 - ALL STEEL AND CONNECTION MATERIAL TO BE EXPOSED TO WEATHER (ANTENNAE AND CABLE SUPPORTS) SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AND A153. TOUCH-UP FIELD WELD AREAS WITH ZINC RICH PAINT. PROVIDE TRENCH 90-93 OR EQUAL.

05500 - MISCELLANEOUS METALS

HOLLOW METAL WORK

- GENERAL
 - SUBMITTALS

SHOP DRAWINGS: SUBMIT COMPLETE SHOP DRAWINGS INCLUDING SCHEDULES, CONSTRUCTION DETAILS, METHOD OF ANCHORAGE AND GAUGE OF METAL FOR APPROVAL.
- MATERIALS
 - DOORS:
 - DOORS SHALL BE 1-3/4" THICK, 1 1/2" HR. "B" LABEL FABRICATED FROM 18 GAUGE STEEL SHEETS FOR INTERIOR DOORS. CONSTRUCTION SHALL CONFORM TO STEEL DOOR INSTITUTE STANDARD SDI-100.
 - THE INTERIOR OF THE DOORS SHALL BE COMPLETELY FILLED WITH A RIGID URETHANE CORE FOAM IN PLACE AND CHEMICALLY BONDED TO ALL INTERIOR SURFACES. URETHANE FOAM SHALL BE SELF-BONDING, SELF-HARDENING AND SELF-EXTINGUISHING TYPE.
 - DOORS SHALL HAVE FLUSH SEAMLESS FACE SHEETS WITH VERTICAL EDGE JOINT BETWEEN FACE SHEETS COMPLETELY FILLED AND GROUND SMOOTH TO PROVIDE A SEAMLESS APPEARANCE.
 - TOP AND BOTTOM OF DOORS SHALL BE CLOSED FLUSH BY 16 GAUGE STEEL CHANNELS.

- DOORS SHALL BE MORTISED FOR 4-1/2" TEMPLATE TYPE HINGES. HINGE REINFORCEMENT SHALL BE 7 GAUGE STEEL DRILLED AND TAPPED BY THE DOOR MANUFACTURER. OTHER HARDWARE REINFORCEMENT AND PREPARATION SHALL COMPLY WITH STEEL DOOR INSTITUTE STANDARD SDI-107.
- DOORS PREPARED FOR UTES SHALL HAVE THE OPENINGS FRAMED AND SECURELY ATTACHED. GLAZING BEADS SHALL BE SHAPED IN PLACE.
- THE PRODUCT OF THE GECO COMPANY AND PIONEER INDUSTRIES WHICH CONFORM TO THESE SPECIFICATIONS ARE APPROVED FOR USE. OTHERS MAY BE USED IF APPROVED EQUAL TO EXISTING WORK.
- LOCKSET SHALL BE SIMPLEX 1000 WITH STRIKE, SATIN FINISH (NO SUBSTITUTES).

- DOOR FRAMES
 - DRYWALL TYPE:
 - FRAMES SHALL BE CONSTRUCTED TO CONFORM TO STEEL DOOR INSTITUTE STANDARD SDI-100.
 - FRAMES SHALL BE FORMED FROM 16 GAUGE STEEL. FRAMES SHALL BE UNCOATED-DOWN FIELD-ASSEMBLED TYPE. FRAME HEAD AND JAMB MEMBERS SHALL HAVE DIE-CUT, MITERED CORNERS AND "LOCK-TAB" CONSTRUCTION.
 - FRAMES SHALL HAVE 5/8" HIGH INTEGRAL STOPS AND 2" FACES, UNLESS OTHERWISE DETAILED.
 - HINGE REINFORCEMENT SHALL BE 7 GAUGE STEEL. UNIVERSAL TYPE STRIKE REINFORCEMENT SHALL BE 12 GAUGE STEEL. JAMBS SHALL BE MORTISED FOR 4-1/2" TEMPLATE HINGES AND FOR UNIVERSAL LOCK STRIKE PER ANSI A 115.1 AND 2. ALL REINFORCEMENT SHALL BE DRILLED AND TAPPED BY THE FRAME MANUFACTURER PER HARDWARE TEMPLATES. HEADS SHALL BE MORTISED AND REINFORCED FOR CLOSERS PER HARDWARE TEMPLATES, WHEN REQUIRED.

- ANCHORS
 - JAMB ANCHOR: FURNISH JAMB ANCHORS AS REQUIRED TO SECURE FRAMES TO ADJACENT CONSTRUCTION, FORMED OF NOT LESS THAN 18 GAUGE STEEL.
 - FLOOR ANCHORS: PROVIDE FLOOR ANCHORS FOR EACH JAMB AND MULLION WHICH EXTENDS TO FLOOR, FORMED OF NOT LESS THAN 14 GAUGE STEEL SHEET.
- SHOP PAINTING
 - APPLY PRETREATMENT TO CLEANED METAL SURFACES, USING COLD PHOSPHATE SOLUTION (SSPC-P12), HOT PHOSPHATE SOLUTION (SSPC-P14) OR ZINC CHROMATE-VINYL BUTYL SOLUTION (SSPC-P13).
 - APPLY SHOP COAT OF RUST INHIBITING PRIME PAINT WITHIN TIME LIMITS RECOMMENDED BY PRETREATMENT MANUFACTURER. APPLY A SMOOTH COAT OF EVEN CONSISTENCY TO PROVIDE A UNIFORM DRY FILM THICKNESS OF NOT LESS THAN 2.0 MILS.

- ADJUST AND CLEAN
 - FINAL ADJUSTMENTS: CHECK AND READJUST OPERATING FINISH HARDWARE ITEMS IN HOLLOW METAL WORK PRIOR TO FINAL INSPECTION. LEAVE WORK IN COMPLETE AND PROPER OPERATING CONDITION. REMOVE AND REPLACE DEFECTIVE WORK, INCLUDING DOORS OR FRAMES WHICH ARE WARPED, BOWED OR OTHERWISE UNACCEPTABLE.
 - PRIME COAT TOUCH-UP: IMMEDIATELY AFTER ERECTION, SAND SMOOTH ANY RUSTED OR DAMAGED AREAS OF PRIME COAT AND APPLY TOUCH-UP COMPATIBLE AIR-DRYING PRIMER.

07720 - FIRESTOPPING

- ALL FIRESTOP MATERIALS AND ASSEMBLIES SHALL BE PROVIDED BY "3A FIRE PROTECTION PRODUCTS" OR APPROVED EQUAL. MANUFACTURER SHALL DETERMINE APPROPRIATE SYSTEM FOR INDIVIDUAL APPLICATION SO AS TO MAINTAIN REQUIRED FIRE RATING.

07900 - PAINTING AND SEALING

- GENERAL
 - DOCUMENTS

WORK INCLUDED UNDER THIS SECTION IS SUBJECT TO THE AGREEMENT, GENERAL CONDITIONS AND CONTRACT DRAWINGS, ALL OF WHICH ARE HEREBY MADE A PART OF THIS SECTION.
 - SCOPE

PROVIDE ALL MATERIALS, LABOR AND SUPERVISION, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE WORK OF THIS SECTION INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:

 - INTERIOR JOINTS
 - EXPANSION AND CONTROL JOINTS - SEALANT #1.
 - OTHER INTERIOR JOINTS AS INDICATED ON THE DRAWINGS - SEALANT #2.
- SUBMITTALS
 - SUBMIT SAMPLES OF ALL SEALANT MATERIALS FOR APPROVAL BY OWNER'S REPRESENTATIVE, ACCOMPANIED BY A CERTIFICATE FOR EACH TYPE SHOWING COMPLIANCE WITH THE REQUIREMENTS OF THIS SPECIFICATION.
 - SUBMIT COLOR CHARTS (OR SAMPLES) FOR COLOR SELECTIONS.
 - SUBMIT SCHEDULE, INCLUDING USE LOCATIONS OF EACH SEALANT TYPE SUBMITTED, FOR APPROVAL.

- SEALANTS LISTED BELOW ARE THE PRODUCTS OF TREMCO INCORPORATED AND THE Sika CORPORATION AND ARE GIVEN AS REFERENCE STANDARDS FOR THE WORK OF THIS SECTION. EQUAL PRODUCTS BY THE POCORA CORPORATION, GENERAL ELECTRIC COMPANY - SILICONE PRODUCTS, AND LOW-CORNING WILL BE ACCEPTABLE, SUBJECT TO THESE SPECIFICATIONS:
 - SEALANT #1 SHALL BE A ONE-PART POLYURETHANE SEALANT MEETING FEDERAL SPECIFICATION IT-S-00230C, CLASS A, TYPE II, SUCH AS SIKAFLEX-1A.
 - SEALANT #2 SHALL BE A ONE-PART ACRYLIC LATEX SEALANT SUCH AS TREMCO ACRYLIC LATEX CAULK.
- PRIMER FOR SEALANTS SHALL BE AS RECOMMENDED BY SEALANT MANUFACTURER.
- JOINT FILLER FOR SEALANT SHALL BE A CLOSED CELL, NON-ABSORBENT, NON-STAINING MATERIAL SUCH AS ETHAFOAM AS MANUFACTURED BY DOW-CORNING.
- BONDBREAKERS SHALL BE AS RECOMMENDED BY SEALANT MANUFACTURER.
- COLORS FOR SEALANTS SHALL BE AS SELECTED BY THE OWNER FROM MANUFACTURERS COLOR CHART AND/OR COLORS SHALL MATCH ADJACENT SURFACES.
- DELIVERY AND STORAGE
 - MATERIALS SHALL BE DELIVERED TO THE JOB IN SEALED CONTAINERS WITH MANUFACTURER'S ORIGINAL LABELS ATTACHED.
 - MATERIALS SHALL BE STORED UNDER THE ENVIRONMENTAL CONDITIONS RECOMMENDED BY THE MANUFACTURER.

III. EXECUTION

- SURFACE PREPARATION
 - JOINTS AND SURFACES WHICH ARE TO BE CAULKED OR SEALED SHALL BE CLEAN, DRY AND FREE OF DUST, LOOSE MORTAR AND OTHER FOREIGN MATERIALS.
- APPLICATION
 - INSTALL JOINT BACKING WITH A BLUNT INSTRUMENT SO AS NOT TO PUNCTURE THE SURFACE SIN. SIZE OF JOINT BACKING SHOULD BE DETERMINED BY TAKING THE JOINT WIDTH AND ADDING 25% TO ASSURE PROPER COMPRESSION OF BACKER ROD.
 - APPLY SEALANT WITH A CAULKING GUN, USING PROPER SIZED NOZZLES. USE SUFFICIENT PRESSURE TO PROPERLY FILL THE JOINTS WITH SEALANT TO THE BACK-UP MATERIAL. PROVIDE MASKING TAPE FOR EXACT BEAD LINES. APPLY TAPE AFTER SURFACE CONDITIONER IS APPLIED.
 - AFTER JOINTS HAVE BEEN COMPLETELY FILLED, THEY SHALL BE NEATLY TOoled TO ELIMINATE AIR POCKETS OR VOIDS, AND TO PROVIDE A SMOOTH, NEAT APPEARING FINISH IN INTIMATE CONTACT WITH INTERFACING SURFACES. AFTER TOOLING, SURFACE OF SEALANT SHALL BE FREE OF RIDGES, WRINKLES, SAGS, AIR POCKETS AND EMBEDDED IMPURITIES.
 - IMMEDIATELY CLEAN ADJACENT MATERIALS WHICH HAVE BEEN SOILED; LEAVE WORK IN A NEAT, CLEAN CONDITION.
 - DO NOT APPLY SEALANT WHEN SURFACE TEMPERATURE OF MATERIALS IS BELOW OR ABOVE THAT RECOMMENDED BY THE MANUFACTURER.

C. WORKMANSHIP

WORKMANSHIP SHALL BE IN STRICT COMPLIANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIALS. THE CONTRACTOR SHALL BE PREPARED TO SHOW EVIDENCE OF WORKMANSHIP OF JOBS AT LEAST THREE YEARS OLD.

08750 - WEATHERSTRIPPING, SEALS & THRESHOLDS

- DOCUMENTS

WORK INCLUDED UNDER THIS SECTION IS SUBJECT TO THE AGREEMENT, GENERAL CONDITIONS AND CONTRACT DRAWINGS, ALL OF WHICH ARE HEREBY MADE A PART OF THIS SECTION.
- SCOPE

PROVIDE ALL MATERIAL, LABOR AND SUPERVISION, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE WORK OF THIS SECTION INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:

 - WEATHERSTRIPPING
 - THRESHOLDS
 - AUTOMATIC DOOR BOTTOMS
 - DOOR SLEENERS

- MATERIALS

THIS SPECIFICATION IS BASED UPON THE PRODUCTS OF PEMKO MANUFACTURING COMPANY, UNLESS OTHERWISE NOTED. SIMILAR PRODUCTS BY REESE ENTERPRISES, INC. OR ZERO WILL ALSO BE ACCEPTABLE SUBJECT TO THESE SPECIFICATION REQUIREMENTS.

 - WEATHERSTRIPPING AT HEAD AND JAMBS OF HOLLOW METAL DOORS, PEMKO MODEL #319C, CLEAR ANODIZED ALUMINUM FINISH.
 - THRESHOLDS, ZERO MODEL #1675A, ALUMINUM.
 - AUTOMATIC DOOR BOTTOM, PEMKO MODEL #411AR, AT NEW DOOR INTO TELECOMMUNICATION ROOM.
 - DOOR SLEENERS, HAGER HINGE COMPANY, MODEL #3070, 3 PER JAMB.

III. EXECUTION

- CAREFULLY COORDINATE THE WORK OF THIS SECTION WITH HOLLOW METAL WORK.
- INSTALL COMPONENTS IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

09250 - CYCLAM OVERLAY

- GENERAL
 - DOCUMENTS

WORK INCLUDED UNDER THIS SECTION IS SUBJECT TO THE AGREEMENT, GENERAL CONDITIONS, AND CONTRACT DRAWINGS, ALL OF WHICH ARE HEREBY MADE A PART OF THIS SECTION.
 - SCOPE

PROVIDE ALL MATERIALS, LABOR AND SUPERVISION, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE WORK OF THIS SECTION INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:

 - GYPSUM WALLBOARD.
 - ACCESSORIES.
- RELATED WORK SPECIFIED ELSEWHERE
 - PAINTING.

II. MATERIALS

A. PRODUCTS

- GYPSUM BOARD:
 - STANDARD GYPSUM WALL BOARD, FIRE CODE "C", 5/8" THICK X 4'-0" WIDTH X LENGTH REQUIRED TO ELIMINATE HORIZONTAL JOINTS (MAXIMUM 14'-0"). BOARDS SHALL HAVE TAPERED, BEVELED BEVELED EDGES. ASTM COMPLIANCE C-36.

2. ACCESSORIES:

- STUDS AND RUNNERS: GALVANIZED STEEL, 1" x 2" FURRING STRIPS, 1-5/8" AND 3-5/8" WIDE ASTM COMPLIANCE C 645. (SEE PLAN FOR LOCATIONS).
- CEILING RUNNERS AND HANGERS: GALVANIZED STEEL, 1-1/2" RUNNERS AND 1/2" (25 MSG) RESILIENT FURRING CHANNELS.
- SCREWS: STEEL, CORROSION RESISTANT, BUGLE HEAD, LENGTH AS RECOMMENDED BY WALL BOARD MANUFACTURER FOR MATERIALS SPECIFIED. ASTM COMPLIANCE C 646.
- TAPE AND SPACKLING COMPOUND: USE WATER RESISTANT JOINT COMPOUND.

3. ACOUSTICAL INSULATION (09530):

- INSTALL ACOUSTICAL INSULATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ALL GYPSUM BOARD PARTITIONS RECEIVING ACOUSTICAL INSULATION SHALL HAVE ALL BUTTING PERIMETERS OF GYPSUM BOARD AND ANY ELECTRIC OR DUCT PENETRATIONS SEALED WITH ACOUSTICAL SEALANT.
- APPROVED MANUFACTURERS

THE FOLLOWING MANUFACTURERS' PRODUCTS ARE ACCEPTABLE SUBJECT TO THESE SPECIFICATIONS:

 - U.S. GYPSUM
 - GOLD BOND
 - FLINTKOTE

- INSTALLATION AND FASTENERS TYPE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

09450 - RESILIENT FLOORING

FLOOR TILE

- VINYL WALL BASE/F SS-W-40, TYPE II, 4" HIGH, 0.080" GAGE, WITH MATCHING STOPS & PREFORMED CORNER UNITS, STANDARD TOP-SET COVE, UNLESS OTHERWISE NOTED.
- APPLY WALL BASE IN LENGTHS AS LONG AS PRACTICABLE TO WALLS, COLUMNS, AND ALL PERMANENT FIXTURES WHERE INDICATED. MITERED DOOR CORNERS ARE NOT ACCEPTABLE.

09900 - PAINTING

I. GENERAL

- SUBMITTALS
 - MANUFACTURER'S DATA: SUBMIT TWO COPIES OF MANUFACTURER'S TECHNICAL INFORMATION INCLUDING PAINT LABEL ANALYSIS AND APPLICATION INSTRUCTIONS FOR EACH MATERIAL PROPOSED FOR USE. TRANSMIT A COPY OF EACH MANUFACTURER'S INSTRUCTIONS TO THE PAINT APPLICATOR.
 - APPROVED MANUFACTURERS OR APPROVED EQUAL.

- CON-LUX, BENJAMIN MOORE, SHERWIN WILLIAMS OR GLODDEN

II. EXECUTION

A. INSPECTION AND PREPARATION

- DO NO PAINTING UNTIL OTHER WORK LIKELY TO CAUSE DUST AND DIRT HAS BEEN COMPLETED.
- DO NOT PAINT OVER DIRT, DUST, SCALE, GREASE, MOISTURE, SCUFFED SURFACES, OR CONDITIONS OTHERWISE DETRIMENTAL TO THE FORMATION OF A DURABLE PAINT FILM.

- PROTECT ALL ADJACENT SURFACES AND MATERIALS FROM PAINTING OPERATIONS. USE DROP CLOTHS TO PROTECT ADJACENT CONSTRUCTION. USE AN EASILY REMOVABLE MASKING TAPE TO PROTECT SURFACES, WHICH ARE NOT TO BE PAINTED OR WHERE A SHARP LINE IS REQUIRED AT THE TERMINATION OF A PAINTED AREA.

B. APPLICATION

- GENERAL
 - APPLY PAINT IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.

C. CLEAN-UP AND PROTECTION

- DURING THE PROGRESS OF THE WORK, REMOVE FROM THE SITE ALL DISCARDED PAINT MATERIALS, RUBBISH, CANS AND RAGS AT THE END OF EACH WORK DAY. AT COMPLETION OF PAINTING WORK, REMOVE ALL TOOLS, AND SURPLUS MATERIALS.
- UPON COMPLETION OF PAINT WORK, CLEAN WINDOW GLASS AND OTHER PAINT-SPATTERED SURFACES. REMOVE SPATTERED PAINT BY PROPER METHODS OF WASHING AND SCRAPING, USING CARE NOT TO SCRATCH OR OTHERWISE DAMAGE FINISHED SURFACES.

D. PAINT SCHEDULE (BASED OFF CON-LUX)

- INTERIOR PAINT SYSTEMS
 - FERROUS METAL
 - PRIME: SHOP COAT
 - FINISH: 2 COATS SATIN-PLEX
 - GYPSUM BOARD
 - PRIME: 1 COAT JET-PLEX
 - FINISH: 2 COATS SATIN-PLEX
- EXTERIOR PAINT SYSTEMS
 - MASONRY
 - PRIME/ FINISH: PAINT NEW MASONRY INFILL PER OWNER'S REQUIREMENTS, MATCH ADJOINING AREAS.
 - FERROUS METAL
 - PRIME: SHOP COAT
 - FINISH: 2 COATS STEEL GUARD

16000 - ELECTRICAL

I. GENERAL

- DOCUMENTS

ALL WORK INCLUDED UNDER THIS SPECIFICATION IS SUBJECT TO THE AGREEMENT, THE GENERAL CONDITIONS OF THE CONTRACT, SUPPLEMENTARY GENERAL CONDITIONS, SPECIAL CONDITIONS, AND THE CONTRACT DRAWINGS.
- SCOPE

PROVIDE ALL MATERIALS, LABOR, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE WORK OF THIS SECTION, INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:

 - ELECTRICAL SERVICE.
 - TELEPHONE SERVICE.
 - DISTRIBUTION PANELBOARD.
 - SAFETY SWITCHES.
 - LIGHTING CIRCUITS.
 - OUTLETS, PLATES & CABLE TRAYS.
 - LIGHTING FIXTURES & LAMPS.
 - GROUNDING.
 - ANTENNA CABLES & ACCESSORIES.

- ALL DRAWINGS LISTED ON TITLE PAGE OF PLANS INCLUDING ELECTRICAL DRAWINGS.

- THE REFERENCE DRAWINGS AND SPECIFICATIONS SHALL BE CONSIDERED AS MUTUALLY COMPLEMENTARY. ANYTHING SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS ARE NOT INDICATED ON THE DRAWINGS SHALL BE CONSIDERED AS BOTH SHOWN AND SPECIFIED.

- THE FOLLOWING MANUFACTURERS' PRODUCTS ARE ACCEPTABLE SUBJECT TO THESE SPECIFICATIONS:

- U.S. GYPSUM
- GOLD BOND
- FLINTKOTE

C. REFERENCE DRAWINGS AND COORDINATION

- ALL DRAWINGS LISTED ON TITLE PAGE OF PLANS INCLUDING ELECTRICAL DRAWINGS.
- THE REFERENCE DRAWINGS AND SPECIFICATIONS SHALL BE CONSIDERED AS MUTUALLY COMPLEMENTARY. ANYTHING SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS ARE NOT INDICATED ON THE DRAWINGS SHALL BE CONSIDERED AS BOTH SHOWN AND SPECIFIED.
- THE FOLLOWING MANUFACTURERS' PRODUCTS ARE ACCEPTABLE SUBJECT TO THESE SPECIFICATIONS:

- U.S. GYPSUM
- GOLD BOND
- FLINTKOTE

D. OTHER TRADES

- BIDDERS SHALL EXAMINE THE SITE AND THE COMPLETE SET OF PLANS AND SPECIFICATIONS COVERING THE ENTIRE PROJECT. THEY SHALL BECOME FULLY CONVERSANT WITH THE TYPE OF GENERAL CONSTRUCTION AND ALL PERTINENT FACTS AFFECTING THE COST OF CARRYING OUT THE WORK THEY WILL CONTRACT TO PERFORM.

- THIS CONTRACTOR SHALL CHECK CAREFULLY WITH OTHER CONTRACTORS SO AS TO COORDINATE THE LOCATION OF ELECTRICAL EQUIPMENT WITH THE WORK OF OTHER TRADES.

E. RULES AND REGULATIONS

- ALL THE WORK SHALL BE CARRIED OUT IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE N.E.C., NEXTEL, LIGHTNING PROTECTION GROUNDING SYSTEM, LIGHTNING PROTECTION GROUNDING SYSTEM AND SIGNAL REFERENCE GROUND SYSTEM AS SHOWN ON DRAWINGS AND PER NEXTEL GROUNDING REQUIREMENTS.

- MAXIMUM RESISTANCE BY TEST TO GROUND SHALL BE 5 OHMS MEASURED BY CONTRACTOR IN THE ENGINEER'S PRESENCE.

- ALL SPICES FOR GROUND WIRES SHALL BE MADE BY THERMAL PROCESS SUCH AS THAT DEVELOPED AND SOLD BY THE ERICO PRODUCTS, INC., CLEVELAND, OHIO. ALL GROUND CONNECTIONS TO GALVANIZED EQUIPMENT AND TO ALL EQUIPMENT THAT COULD BE REMOVED DURING NORMAL LIFE OF THE FACILITY SHALL BE MADE BY MEANS OF A THERMALLY WELDED LUG BOLTED TO THE EQUIPMENT.

- #2 AWG GROUND WIRE SHALL BE CABLED TO WATER MAIN PIPE. THE GROUND WIRE SHALL BE ROUTED IN 3/4" INSIDE BUILDING TO THE TELECOMMUNICATIONS ROOM. GROUND WIRE SHALL BE CONNECTED TO MAIN GROUND BUSBAR AS INDICATED ON DRAWINGS.

F. VISITING THE PREMISES

- THE ELECTRICAL CONTRACTOR IS REQUIRED TO VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS TO BE MET IN INSTALLING THE WORK AND OTHER WORK NOT DEFINITELY SPECIFIED OR SHOWN TO PROPERLY INSTALL THE COMPLETE SYSTEM AS NO ADDITIONAL ALLOWANCE WILL BE MADE FOR ANY CHANGES HE MAY BE REQUIRED TO MAKE DUE TO EXISTING CONDITIONS.

II. PRODUCTS

- APPROVED MANUFACTURERS

THE CATALOG NUMBER AND THE NAMES OF MANUFACTURERS INDICATE MATERIALS REQUIRED. THE PURCHASE AND INSTALLATION OF NEW SUBSTITUTE MATERIALS WILL NOT BE PERMITTED UNLESS APPROVAL IS OBTAINED IN WRITING, PRIOR TO BIDDING.

- CONTRACTOR SHALL INSTALL A NEW 200 AMPERE, FUSIBLE, NEMA 1, DISCONNECT SWITCH 208V, 3 PHASE AT POINT OF NEW SERVICE ENTRANCE IN 1ST FLOOR AS SHOWN ON CONTRACT DWGS. GROUNDING SHALL BE ACCOMPLISHED BY TIEING #6 AWG GROUND WIRE TO EX. WATER MAIN. SEE GROUNDING SECTION OF SPEC.

- CONTRACTOR SHALL RUN A DEDICATED 2-1/2" GALVANIZED STEEL RACEWAY FROM THE NEW SERVICE ENTRANCE IN 1ST FLOOR TO A POINT NEAR THE TELECOMMUNICATION ROOM AS SHOWN ON THE DRAWINGS. SUPPORT THE CONDUIT NEAR THE CEILING AS REQUIRED. CONTRACTOR SHALL EXTEND 2-1/2" CONDUIT TO THE MAIN DISCONNECT SWITCH IN THE 1ST FLOOR CELL SITE. THE 2-1/2" GALVANIZED STEEL RACEWAY SHALL CARRY 1-#6 AWG, THIN WALL CABLES & 4-4/0 AWG GROUNDING WIRES. THE CONTRACTOR SHALL INSTALL JUNCTION BOXES PER N.E.C. REQUIREMENTS.

III. EXECUTION

- CONTRACTOR SHALL OBTAIN FROM THE UTILITY COMPANY A LIST OF EQUIPMENT NECESSARY FOR THE MOUNTING OF THE CHECK METERING FACILITIES, AND SHALL PROVIDE AND MOUNT SAME WITH THE UTILITY COMPANY'S INSTRUCTION.

C. TELEPHONE SERVICE

- THE CONTRACTOR SHALL ARRANGE WITH THE TELEPHONE COMPANY FOR BRINGING TELEPHONE SERVICE TO THE NEXTEL FACILITY IN THE PHONE ROOM AND PAY FOR ALL CHARGES FOR SAME.
- AT TELEPHONE OUTLET PROVIDE A 4" SQUARE BOX WITH BLANK PLATE TO MATCH RECEPTACLE PLATES.

D. DISTRIBUTION PANELBOARD

- FURNISH AND INSTALL A DISTRIBUTION PANELBOARD FOR LIGHT AND POWER DISTRIBUTION, AS SHOWN ON DRAWINGS AND DESCRIBED HEREIN.
- THE DISTRIBUTION PANEL SHALL BE 208Y/120 VOLT, 3 PHASE, 4 WIRE, 200 AMP, SOLID NEUTRAL AND SHALL CONSIST OF BREAKERS ATTACHED TO THE PANEL BUSSES WITH BOLTED LINK CONNECTIONS HOUSED WITHIN A CODE GAUGE, NEMA 1, GENERAL PURPOSE ENCLOSURE AS SHOWN ON THE DRAWINGS. THE NUMBER OF POLES AND TRIP SETTINGS SHALL BE AS SHOWN ON THE DRAWINGS.
- PANEL SHALL HAVE A NEATLY TYPEWRITTEN CIRCUIT DIRECTORY IN A METAL FRAME WITH A TRANSPARENT COVER ON THE INSIDE OF THE DOOR.

E. SAFETY SWITCHES

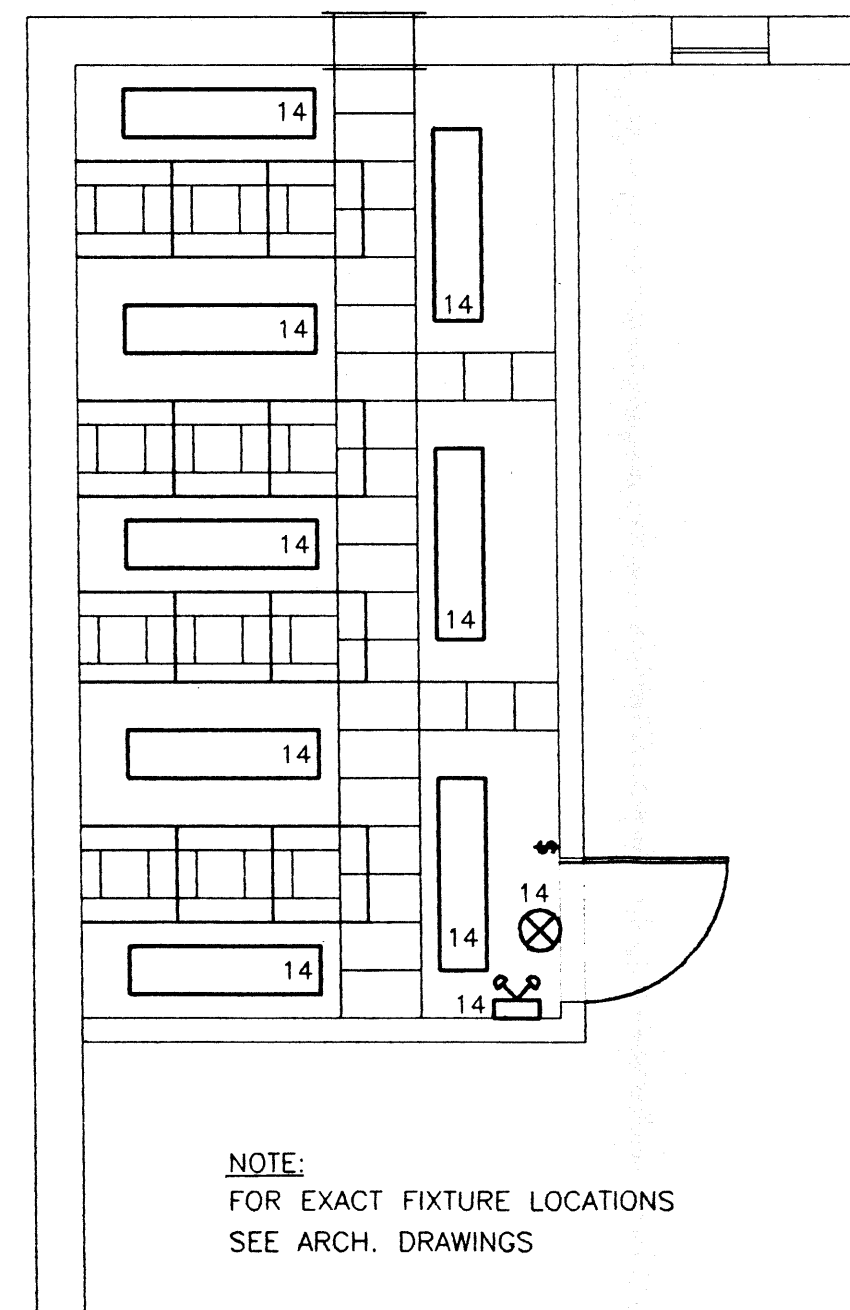
- SWITCHES SHALL BE OF THE TOTALLY ENCLOSED, LOCKABLE TYPE AND MADE OF THE LATCH-MAKE-BREAK MECHANISM WITH FOUR POLES AS SHOWN ON DRAWINGS. FUSIBLE SWITCH SHALL BE EQUIPPED WITH DUAL ELEMENT TIME DELAY TYPE FUSE.

- SWITCH SHALL BE AS MANUFACTURED BY SQUARE "D" - HEAVY DUTY, CLASS 3110, NEMA 1 ENCLOSURE, RATED FOR 200 AMPERES OR EQUAL.

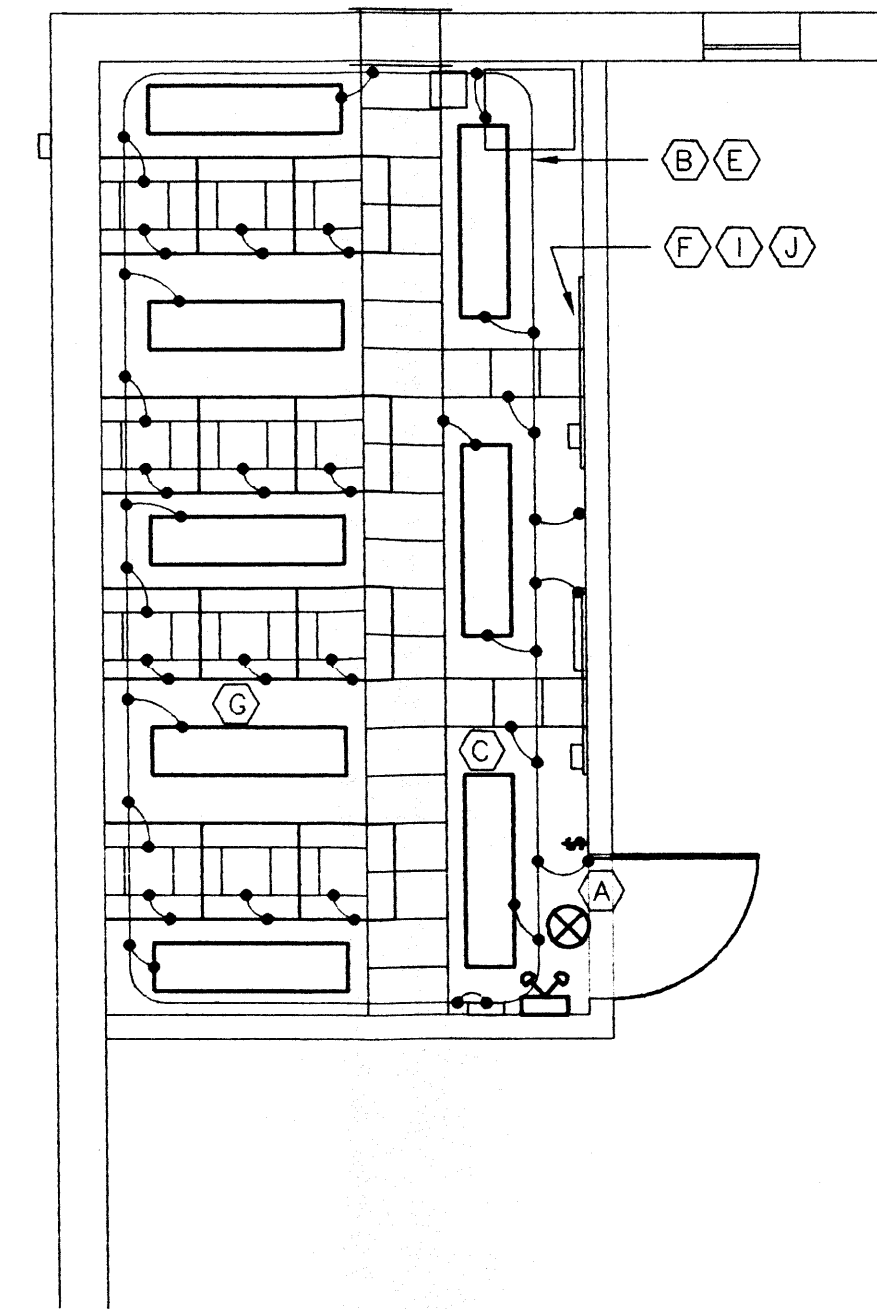
F. LIGHTING & RECEPTACLE CIRCUITS

- FURNISH AND INSTALL ALL CONDUITS, OUTLETS, BOXES, WIRES, SWITCHES, RECEPTACLES, ETC., FOR THE COMPLETE LIGHTING AND RECEPTACLE SYSTEMS AS SHOWN ON THE DRAWINGS.
- CONDUIT SHALL BE NEATLY RACKED AND SECURELY FASTENED AT RIGHT ANGLES AND PARALLEL TO BUILDING LINES.
- CIRCUIT WIRING SHALL BE DONE WITH EMT CONDUIT AND SHORT LENGTHS OF ARMORED CABLE. CONDUIT SHALL BE NEATLY RACKED AND SECURELY FASTENED AT RIGHT ANGLES AND PARALLEL TO BUILDING LINES. THE WORK SHALL BE DONE WITH THIN STRANDED WIRE, #12 MINIMUM. BOXES SHALL BE OF #16 GAUGE STAMPED STEEL, R.O. AND OF THE TYPE AND SIZE REQUIRED BY THE N.E.C. AND OF DIMENSIONS TO HOUSE THE DEVICES AND SPLICES WITHOUT CROWDING. SPLICES SHALL BE MADE WITH APPROVED WIRE-NUTS OF MANUFACTURE OF "SCOTCH-LOK" CONNECTORS.

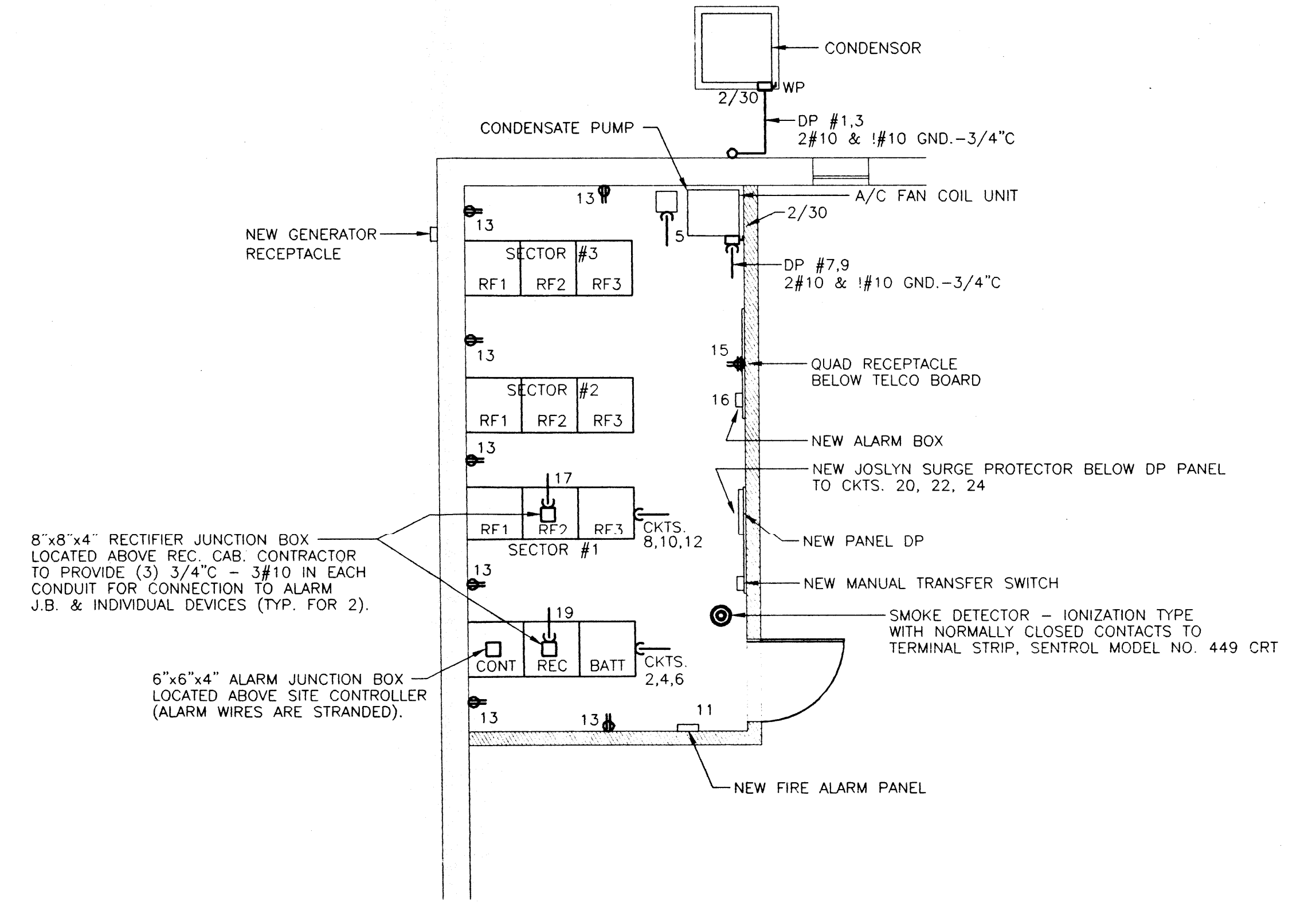
G. DEVICES, PLATES AND CABLE TRAYS



A REFLECTED CEILING PLAN
1/4" = 1'-0"

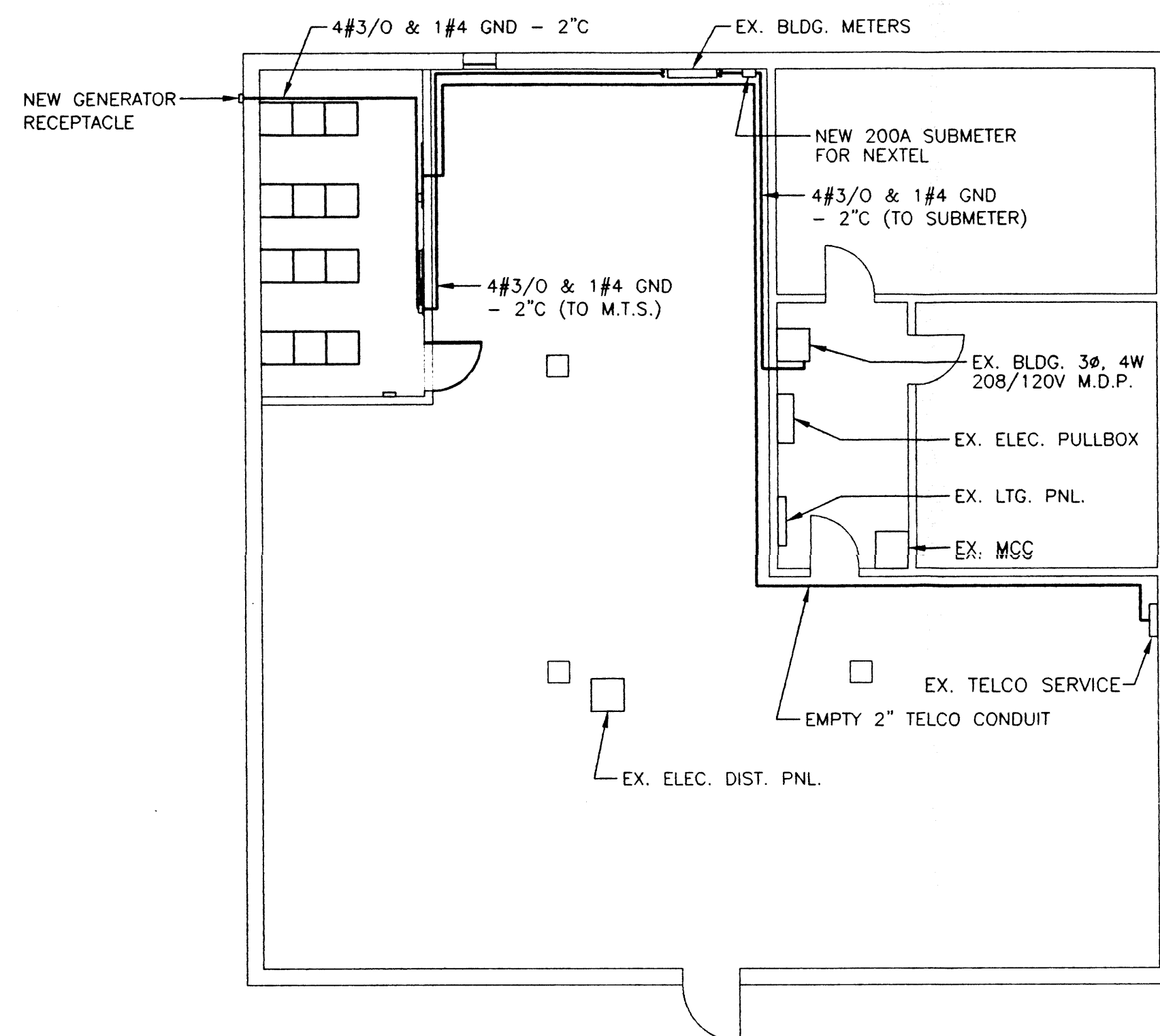


B GROUNDING PLAN
1/4" = 1'-0"



C EQUIPMENT PLAN
1/4" = 1'-0"

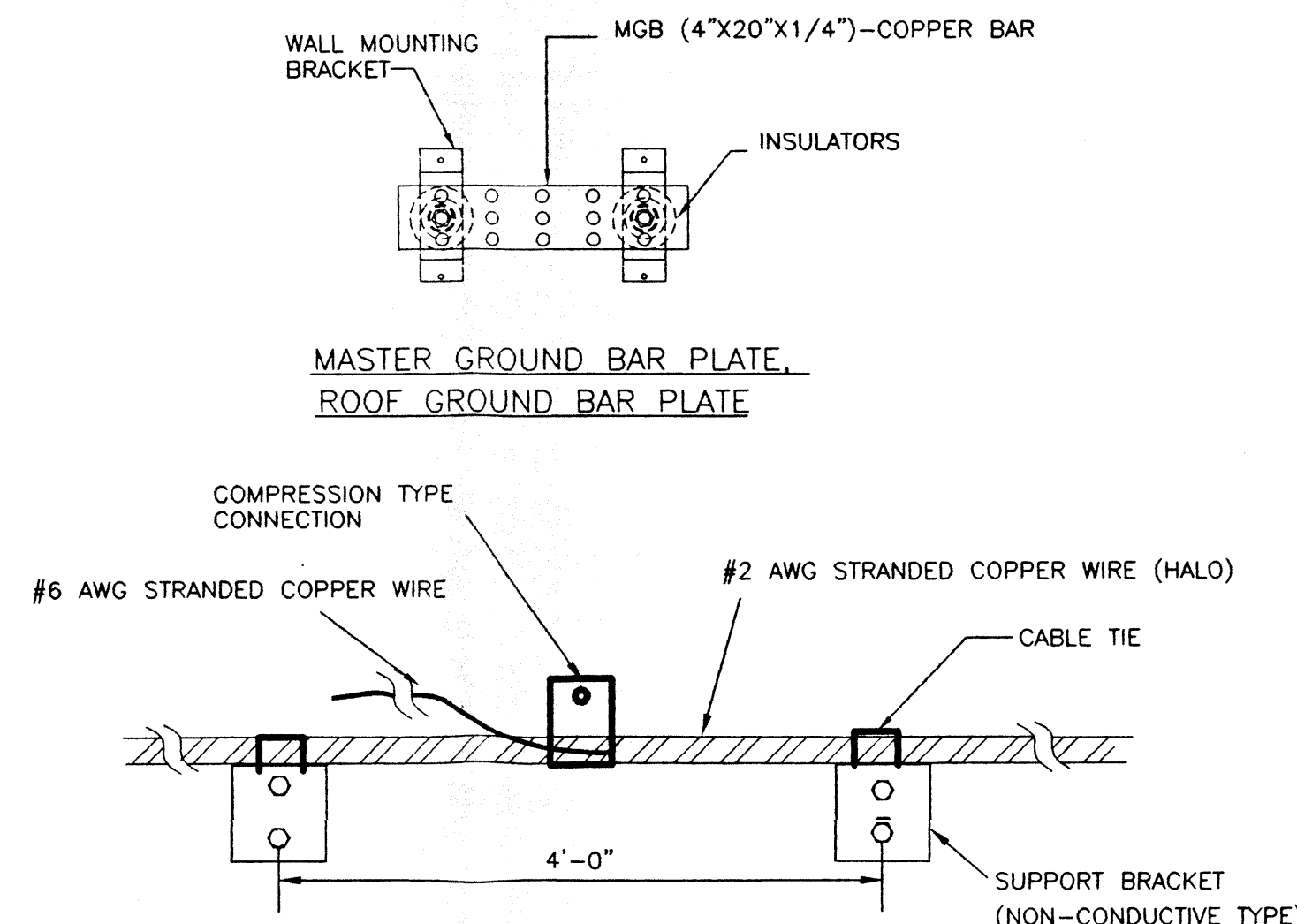
- NOTES:**
1. SECTORS 2 AND 3 FUTURE - NOT IN THIS SCOPE OF WORK.
2. PROVIDE SHALL MEAN FURNISH AND INSTALL.



C OVERALL BUILDING PLAN
1/4" = 1'-0"

EQUIPMENT

- A** CONCEALED #6 GRD. TO STEEL BUCKS (EACH SIDE & LINTEL) AND DOOR WITH CLAMPED OR CRIMPED CONNECTION
- B** #6 GRD. GREEN INSUL. WIRE WITH CLAMPED OR CRIMPED CONN. TO ROOM PERIMETER GROUND CABLE (TYP.)
- C** #6 GREEN INSUL. WIRE BOUND JUMPERS AT ALL CABLERACK CONN. VISIBLY SCRAPE EXISTING PAINT TO INSURE GROUNDING INTEGRITY (TYP.)
- D** (3) - 6"Ø GALV. SLEEVES.
- E** #2 AWG STRANDED COPPER WIRE (PERIPHERAL) ATTACHED AT 7'-4" A.F.F. (SEE DETAIL)
- F** GRD. BAR PLATE INSIDE ROOM.
- G** #6 AWG. INSUL. STRANDED COPPER WIRE FROM RADIO EQUIPMENT TO GND. BAR (BY EQUIP. INSTALLER)
- H** CONTRACTOR TO CADWELD #2 AWG INSUL. GRD. CABLE FROM GRD. BAR PLATE TO EXIST. WATER MAIN PIPE. VERIFY EXACT LOCATION WITH NEXTEL CONST. MGR. & OWNER.
- I** GRD. BAR PLATE OUTSIDE ROOM.
- J** #2 AWG GROUND WIRE ROUTED TO ROOF. ROUTE ADJACENT TO ANTENNA CABLE.



PERIPHERAL GROUNDING WIRE (HALO) CONNECTION DETAIL

HALO ROOM GROUND CONDUCTOR
EQUIPMENT TO BE CONNECTED BY COMPRESSION TYPE CONNECTION TO HALO GROUNDING WIRE INCLUDE:

1. OVERHEAD CABLE RACKING ALL JUMPED TOGETHER
2. DOOR FRAMES
3. HVAC FRAMES
4. NEW ELECTRICAL PANEL
5. ALL OTHER NON-RBA AND METALLIC EQUIPMENT
6. ANY OTHER PERMANENT, SIGNIFICANT, METAL OBJECT WITHIN SEVEN FEET OF ANY OTHER GROUND OBJECT
7. ELECTRICAL UNIT HEATER

EQUIPMENT GROUND BAR (BY EQUIPMENT INSTALLER)

1. ON EXTERIOR OF BUILDING BELOW GALV. SLEEVES
2. ON INSIDE BELOW SLEEVES
3. ON ROOF JUST BEFORE CABLES LEAVE ROOF

#2 SOLID CAD WELD FROM ROOF TO OUTSIDE OF ROOM (GROUND CONNECTION TO BE KEPT OUTSIDE OF ROOM) THEN RUN TO WATER MAIN.

EQUIPMENT TO BE CONNECTED TO THE EQUIPMENT GROUND BAR:

1. RACK GROUND CONNECTIONS ON ALL RADIO RACKS
2. GROUND BARS ON ALL DC POWER DISTRIBUTION PANELS
3. TRANSMISSION RACKS
4. TELEPHONE PROTECTION GROUNDING TERMINAL

* BY EQUIPMENT INSTALLER

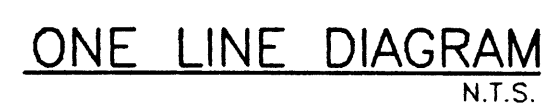
NORTHEAST UTILITIES CO.
LOAD LETTER FILED WITH MARTY COLADARCI

AT & T
THOMAS C. FORD COMMUNICATIONS TECHNICIAN
1-203-879-2558

NOTE:
ELECTRICAL WORK IS NOT PART OF THE BUILDING PERMIT APPLICATION.

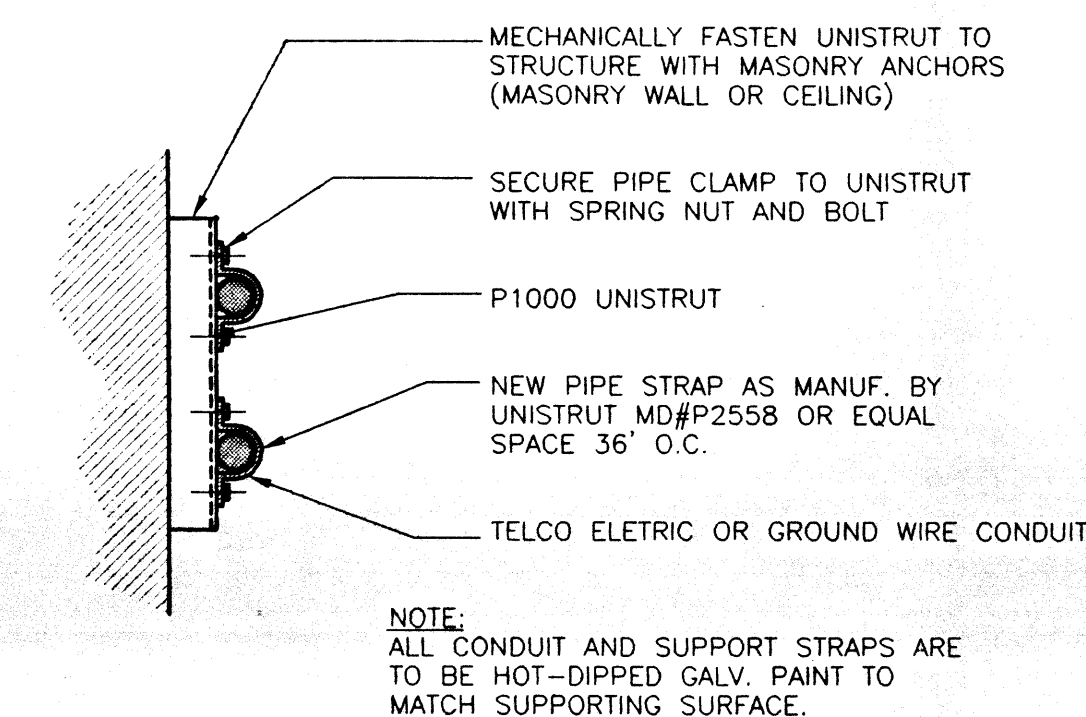
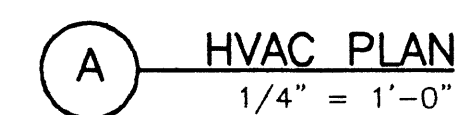
SYMBOL LIST	
	MANUAL TRANSFER SWITCH
	QUADPLEX RECEPTACLE
	DUPLEX CONVENIENCE RECEPTACLE
	SINGLE POLE LIGHT SWITCH
	SURFACE MTD. LIGHT FIXTURE
	EMERGENCY LIGHTING FIXTURE
	EXIT LIGHT
	SMOKE DETECTOR
	THERMOSTAT (HARD WIRED NOT REMOTE)
	GROUND ROD
	CONDUIT TURNED DOWN
	CONDUIT TURNED UP
	UNFUSED DISCONNECT SWITCH
	NUMBERS INDICATE # OF POLES/SWITCH SIZE

1	ISSUED FOR CLIENT REVIEW	TJA	15 APR 97
REV	REVISION DESCRIPTION	BY	DATE
EI ASSOCIATES ARCHITECTURE • ENGINEERING • CONSTRUCTION 115 Evergreen Pl. • Orange, NJ 07018 • (201) 672-5100			
GAETANO P. CIPRIANO		ELECTRICAL	
PROFESSIONAL ENGINEER		CLIENT DWG. NO.	
CT LICENSE NO. 15383		EIA PROJECT NO.	
		EE4444	
		EIA DRAWING NO.	
		E-1	
SCALE AS NOTED		PROJECT	
DRAWN BY: ASG		NEXTEL COMMUNICATIONS	
DESIGNED BY: ASG		SITE # CT-0066	
CHECKED BY: ASG		16 TITICUS MOUNTAIN ROAD	
APPROVED BY: ASG		NEW FAIRFIELD, CT	
PROJECT MANAGER:		TITLE	
		FLOOR, REFLECTED CEILING, GROUNDING PLAN, & DETAILS	
		ISSUE DATE 15 APR 97	
		REVISION	



SURGE ARRESTOR GENERAL NOTES:

1. GROUND BUS IN SURGE ARRESTOR IS UTILIZED ONLY AS AN EQUIPMENT CASE GROUND.
2. ALL CONDUCTORS SHALL BE FANNED OUT SMOOTHLY, NO RIGHT ANGLE BENDS ARE PERMITTED. POSITION ALL LEADS A, B, C, N, G TOGETHER SO THAT THEY WILL BE IN CLOSE PROXIMITY TO EACH OTHER. LENGTH SHALL BE AS SHORT AS POSSIBLE BUT NOT LONGER THAN 8".
3. WIRING FROM THE SURGE ARRESTOR TO THE NEW CIRCUIT BREAKER PANEL SHALL BE #4 CU, OR AS SPECIFIED BY SURGE ARRESTOR MANUFACTURER.
4. SURGE ARRESTOR FURNISHED BY NEXTEL AND INSTALLED BY CONTRACTOR.



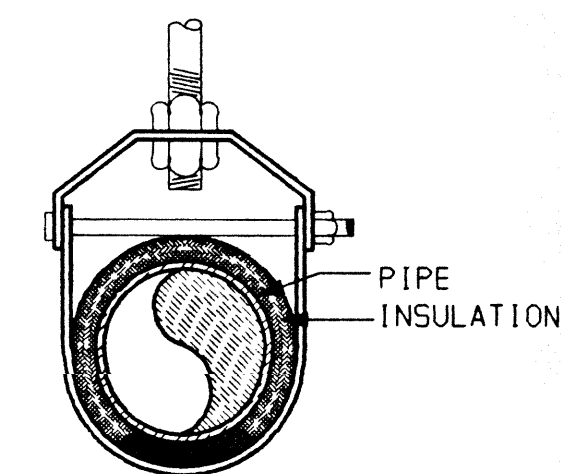
(B) CONDUIT SUPPORT DETAIL
1-1/2" = 1'-0"

FOR 120/208 VOLT BRANCH CIRCUIT WIRING,
THE MINIMUM WIRE SIZE SHALL BE AS FOLLOWS:

- 20 AMP. CIRCUIT BREAKER ---- # 12 AWG
30 AMP. CIRCUIT BREAKER ---- # 10 AWG
40 AMP. CIRCUIT BREAKER ---- # 8 AWG
60 AMP. CIRCUIT BREAKER ---- # 6 AWG
ALL CONTROL WIRING #14 AWG

GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH REQUIREMENTS OF NEC AND OTHER APPLICABLE CODES AND AGENCIES HAVING JURISDICTION.
2. PROVIDE EQUIPMENT GROUNDING AS PER NATIONAL ELECTRICAL CODE REQUIREMENTS, AND NEXTEL SPECIFICATIONS.
3. COORDINATE WITH OTHER TRADE CONTRACTORS FOR THE SCOPE OF INSTALLATION WORK AND POWER SUPPLY FOR THEIR CONTROL SYSTEMS.
4. ALL WIRES SHALL BE TYPE THWN STRANDED COPPER, WITH INSULATION RATED 600V, #12 AWG MINIMUM, IN 3/4" MIN. SIZE GALVANIZED STEEL CONDUIT, UNLESS NOTED OTHERWISE.
5. THE CONTRACTOR SHALL SUBMIT, FOR THE ENGINEER'S APPROVAL, DETAILED SHOP DRAWINGS OF ALL EQUIPMENT SPECIFIED, AS WELL AS DETAILED INSTALLATION LAYOUTS.
6. CONDUIT SHALL RUN AT RIGHT ANGLES OR PARALLEL TO BUILDING LINES AND SHALL BE NEATLY RACKED AND SECURELY FASTENED. INSULATED BUSHINGS AND DOUBLE LOCKNUTS SHALL BE USED THROUGHOUT. PULL BOXES AS PER N.E.C. REQUIREMENT SHALL BE PROVIDED TO FACILITATE THE INSTALLATION OF CABLES.
7. ALL CONDUITS SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN ACCORDANCE WITH THE REQUIREMENTS OF THE N.E.C. FURNISH AND INSTALL EXPANSION TYPE FITTINGS WHEREVER CONDUITS PASS THROUGH STRUCTURAL EXPANSION JOINTS.
8. UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE ELECTRICAL CONTRACTOR SHALL TEST THE COMPLETE ELECTRICAL SYSTEM FOR SHORT CIRCUITS, GROUNDS, AND PROPER OPERATION IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.
9. LOCATIONS OF ELECTRICAL EQUIPMENT AND DEVICES ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD.
10. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF LIGHTING FIXTURES, AND MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF MECHANICAL EQUIPMENT.
11. COORDINATE ALL ELECTRICAL WORK AND POWER SHUTDOWN WITH THE OWNER.



NOTE:
HANGERS AND COMPONENTS
SHALL BE COATED WITH
RUST RESISTANT PRIMER

INSULATED PIPES ON CLEVIS HANGERS

NOTE:
ELECTRICAL WORK IS NOT
PART OF THE BUILDING
PERMIT APPLICATION.

1.0 GENERAL

THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, TRANSPORTATION, SERVICE AND APPLIANCES NECESSARY FOR RECEIVING INSTALLING, TESTING AND ADJUSTING OF NEW AIR CONDITIONING SYSTEM FOR NEW EQUIPMENT ROOM.

2.0 AIR CONDITIONING SYSTEM

PROVIDE THE FOLLOWING "DX SPLIT SYSTEM":

AC SYSTEM SHALL BE A FLOOR MOUNTED FAN COIL, TOP DISCHARGE AS MANUFACTURED BY CARRIER, MODEL FBA4NF036000, 36,000 BTUH COOLING W/ UNIT MOUNTED 24V. CONTROLS, 208/230 V/1Ø/60HZ (370 WATTS) ELECTRICAL SERVICE. UNIT SHALL BE FURNISHED COMPLETE WITH ALL STANDARD EQUIPMENT. UNIT MOUNTED CONTROLS, FACTORY SEALED AND TEMPERATURE CONTROL SWITCHES. UNIT SHALL ALSO COME WITH FACTORY INSTALLED, 5KW ELECTRIC HEATER.

PROVIDE CARRIER THERMOSTAT, W/AUTO CHANGEOVER, NON-PROGRAMMABLE,
1-STAGE HEAT, 1-STAGE COOL, MODEL #TSTATCCNAC01.

OUTDOOR AIR COOLED CONDENSING UNIT SHALL BE CARRIER,
MODEL NO. 38CKB036-3, 230V. SINGLE PHASE, 60HZ., NOMINAL
3 TON CAPACITY.

FIELD INSTALLED OPTIONS:
 LOW AMBIENT CONTROL, MODEL NO. LT-32.
 LOW AMBIENT SWITCH (FAN CYCLING) FOR OPERATION
 DOWN TO 0°F. AMBIENT.
 HIGH PRESSURE CONTROL
 LOW PRESSURE CONTROL
 UNIT SHALL ALSO COME COMPLETE WITH WINTER
 START-UP PACKAGE.

2.1 INSTALLATION

INSTALL AC SYSTEM IN ACCORDANCE WITH MANUFACTURER'S
INSTALLATION INSTRUCTIONS. INSTALL UNIT PLUMB,
FIRMLY ANCHORED IN LOCATION INDICATED, AND MAIN-
MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES.

INSTALL AND CONNECT ELECTRICAL DEVICES FURNISHED BY THE MANUFACTURER BUT NOT SPECIFIED TO BE FACTORY MOUNTED. FURNISH COPY OF MANUFACTURER'S ELECTRICAL CONNECTION DIAGRAM SUBMITTAL TO THE ELECTRICAL CONTRACTOR. START-UP A/C UNIT IN ACCORDANCE WITH MANUFACTURER'S START-UP INSTRUCTIONS.

TEST CONTROLS AND DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS. UNIT SHALL BE FULLY CHARGED, TESTED AND READY FOR OPERATION.

REFRIGERANT PIPING- INSTALLATION TO PROVIDE FOR EASE OF MAINTENANCE WITH ALL ACCESSORIES, SIGHT GLASS, FILTER DRIER CHARGING VALVE ETC. AS REQUIRED.

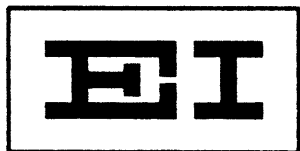
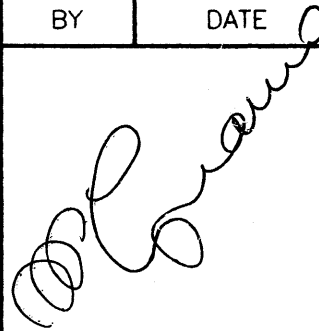
3.0 CONDENSATE PUMP UNIT

VERTICAL TYPE AUTOMATIC SELF CONTAINED PUMPING UNIT.
LITTLE GIANT PUMP CO. (TECUMSEH PRODUCTS CO.)
MODEL VCL-45S CAPACITY 75 GPM @ 40' HD.

ALARM POINTS

- 1. MAGNETIC ALARM DEVICE (INTRUDER)
- 2. SMOKE DETECTORS
- 3. POWER FAILURE
- 4. HI-LO TEMPERATURE

■ ALARMS AS INCLUDED IN OWNER FURNISHED EQUIPMENT.

—	ISSUED FOR CLIENT REVIEW		TJA	15 APR 97	
REV		REVISION DESCRIPTION	BY	DATE	
		EI ASSOCIATES ARCHITECTURE • ENGINEERING • CONSTRUCTION 115 Evergreen Pl • E. Orange, NJ 07018 • (201) 672-5100			
GAETANO P. CIPRIANO		PROFESSIONAL ENGINEER CT. LICENSE NO. 15383		ELECTRICAL	
				CLIENT DWG. NO.	
SCALE AS NOTED		PROJECT NEXTEL COMMUNICATIONS		EIA PROJECT NO. EE4444	
DRAWN BY:		SITE # CT-0066		EIA DRAWING NO.	
DESIGNED BY:		16 TITICUS MOUNTAIN ROAD		E-2	
CHECKED BY:		NEW FAIRFIELD, CT			
APPROVED BY:		TITLE PWR. PLAN, PNL. & LTG. FIXT. SCHEDULES AND GENERAL NOTES MECHANICAL LAYOUT AND SPECS.		ISSUE DATE 8 APR 97	
PROJECT MANAGER:				REVISION —	