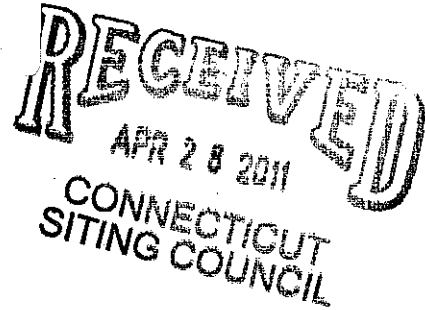


EM-SPRINT-034-110428

April 25, 2011



Chairman Daniel F. Caruso
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06501

SUBJECT: Sprint Spectrum Realty Company L.P.'s Notice of Intent to Make an Exempt Modification to an Existing Facility at 303 Boxwood Lane, Danbury, CT 06810 (Site # CT43XC836)

Dear Chairman Caruso:

Pursuant to R.C.S.A. Sections 16-50j-73 and 16-50j-72(b), Sprint Spectrum Realty Company L.P. (Sprint) hereby gives notice to the Connecticut Siting Council (Council) and to the City of Danbury of its intent to make an exempt modification to an existing telecommunications facility located at 303 Boxwood Lane, Danbury, Connecticut.

Sprint plans to install a hydrogen fuel cell at its 303 Boxwood Lane facility to provide emergency backup power in the event of an electric outage. This planned installation does not constitute a modification subject to the Council's review as it falls within those activities provided for in R.C.S.A. Section 16-50j-72(b)(2). Specifically, this installation will not change the height of the existing tower, will not extend the boundaries of the existing compound, will not increase noise levels at the site by six decibels or more, and will not increase the total radio frequency electromagnetic radiation power density at the site to levels above applicable standards.

PROPOSED INSTALLATION

Sprint plans to install a 4kW ReliOn hydrogen fuel cell generator within the existing fenced equipment compound; the entire installation mounted to the existing concrete and a new 4'0" x 10'0" concrete pad. The fuel cell will be inside a cabinet measuring 3'4" x 2'4" x 6'0". There will also be hydrogen cylinder storage cabinets with overall dimensions of 4'8" x 4'8" x 6'0".

Please contact me at 703.533.1006 should you have any questions about this planned modification.

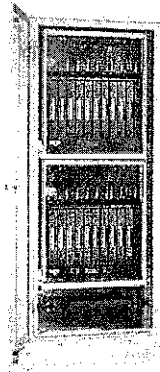
Sincerely,

A handwritten signature in black ink that appears to read "Mark Hulshart".

Mark Hulshart
Principal

cc: Mayor Mark D. Boughton, City of Danbury (city representative)
VP of Finance & Administration, Western Connecticut University (property owner)

T-2000® 4kW Outdoor Solution



Features:

- T-2000® Outdoor Solution
- Ideal for site loads ranging from 0 – 4kW
 - Simple installation
 - Minimal site footprint
- Modular fuel storage solutions available for extended run capabilities

Dimensions (w x d x h)	27.5" x 41" x 72" (70 cm x 104 cm x 183 cm)
Weight	654 lbs / 297.3 kg without cylinders
Rated net power	0 to 4,000 Watts
Rated current	0 to 160A @ 24 VDC / 0 to 80A @ 48 VDC
DC voltage	24 or 48 VDC nominal
Fuel Composition	Standard industrial grade hydrogen (99.95%)
Supply pressure to unit	3.5 to 6 psig / 24 to 41 KPag / 0.24 bar to 0.41 bar
Fuel Consumption	60 slpm @ 4,000 Watts
Hydrogen Storage Capacity	Modular fuel storage solutions available
Ambient temperature	-40°F to 115°F / -40°C to 46°C
Relative humidity	0 to 95% non-condensing
Altitude	-197 ft to 13,800 ft / -60m to 4,206m
Location	Outdoors
Safety Compliance	UL/CSA/CE/NEBS
Water emissions	Max. 30mL / kWh
Noise	47 dBA @ 5 ft
Remote Monitoring/Control	System configuration & status / Historical & operational data
Communications	RJ45 / DB9/ Dry Contact

Sprint



SITE NAME: DANBURY-W. CT. UNIV.

SITE NUMBER: CT43XC836

SITE ADDRESS: 303 BOXWOOD LANE
DANBURY, CT 06810

SITE TYPE: EXISTING 100'-0" SELF SUPPORT TOWER

Sprint

6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251



BLACK & VEATCH

10950 GRANDVIEW DRIVE
OVERLAND PARK, KANSAS 66210
(913) 458-2000

PROJECT NO: 168202

DRAWN BY: AKJ

CHECKED BY: BJH

SITE INFORMATION

AREA MAP

APPLICABLE CODES

DRAWING INDEX

SITE ADDRESS:
303 BOXWOOD LANE
DANBURY, CT 06810

PROPERTY OWNER:
WESTERN CONNECTICUT STATE UNIVERSITY
MILL PLAIN ROAD
DANBURY, CT 06810

EQUIPMENT SUPPLIER:
Relion
15913 EAST EUCLID AVENUE
SPOKANE, WASHINGTON 99216

DARIN PAINTER
DIRECTOR OF SALES
OFFICE: 913-766-4256 MOBILE: 913-486-2550
dpainter@relion-inc.com

POWER COMPANY:
CONNECTICUT LIGHT AND POWER

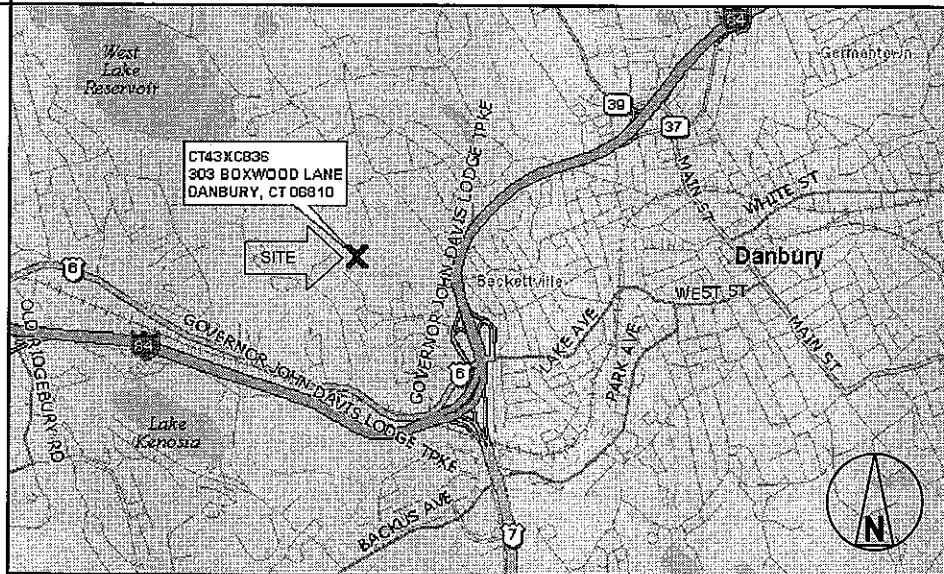
TELCO COMPANY:
NA

COUNTY:
FAIRFIELD

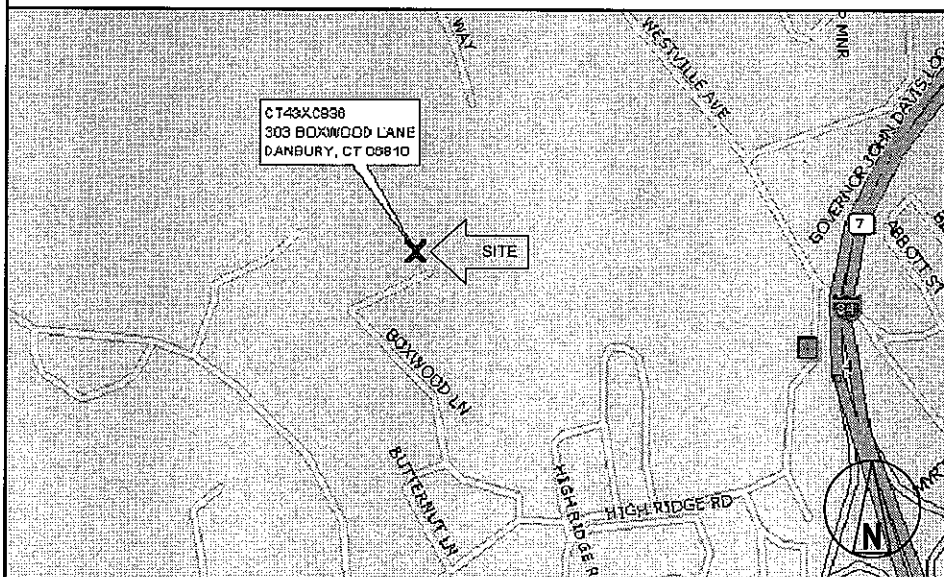
LATITUDE (NAD83):
41° 23' 41.930" N
41.39498056

LONGITUDE (NAD83):
73° 29' 12.270" W
-73.48674167

CONTACT ENGINEER:
BRYAN HANSEN
WORK: 913-458-7343
E-MAIL: hansenbj@bv.com



LOCATION MAP



ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

2003 INTERNATIONAL BUILDING CODE WITH 2005 STATE OF CONNECTICUT AMENDMENTS

2003 INTERNATIONAL MECHANICAL CODE WITH 2005 STATE OF CONNECTICUT AMENDMENTS

2003 INTERNATIONAL PLUMBING CODE WITH 2005 STATE OF CONNECTICUT AMENDMENTS

2005 NEC NATIONAL ELECTRICAL CODE

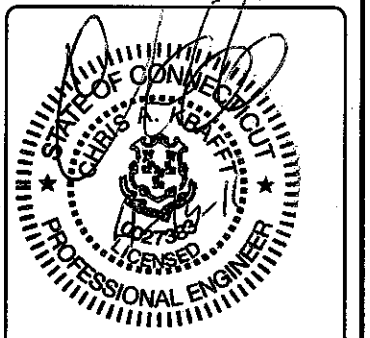
IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL.

PROJECT DESCRIPTION

INSTALL POWER BACK UP EQUIPMENT TO EXISTING SITE WITHIN EXISTING COMPOUND. INSTALL (1) NEW FUEL CELL WITH (1) FUEL STORAGE CABINET ON CONCRETE PAD AND CONNECT TO THE SITE'S DC POWER PLANT BUS.

T-1	TITLE SHEET & PROJECT DATA
C-1	OVERALL SITE PLAN
C-2	SITE PLAN
S-1	EQUIPMENT CABINET DETAILS
S-2	CONCRETE PAD DETAILS
M-1	HYDROGEN PIPING SCHEMATIC
E-1	ELECTRICAL ONE-LINE DIAGRAM
E-2	OVERALL CONDUIT DETAILS
E-3	ELECTRICAL WIRING DIAGRAM
E-4	FUEL CELL INSTALL DETAIL
G-1	GROUNDING PLAN AND DETAILS

REV	DATE	DESCRIPTION
0	04/18/11	ISSUED FOR CONSTRUCTION



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

ENGINEER OF RECORD

CHRISTOPHER ALAN KRAFFT
PE # 0027383
BLACK & VEATCH CORPORATION

DANBURY-W. CT. UNIV.
CT43XC836
303 BOXWOOD LANE
DANBURY, CT 06810
CO-LOCATION

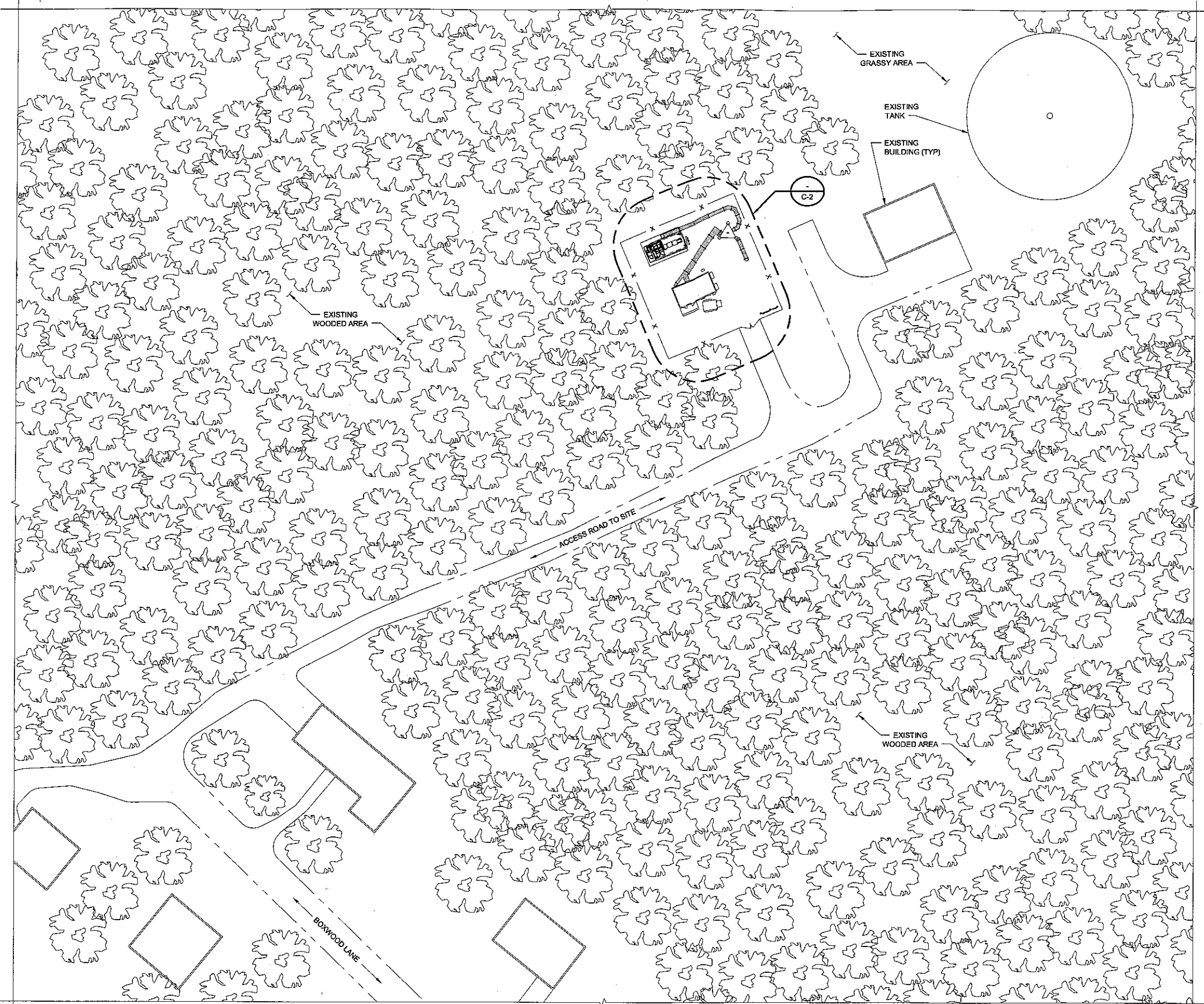
SHEET TITLE
TITLE SHEET & PROJECT DATA

SHEET NUMBER

T-1

DRIVING DIRECTIONS FROM NEAREST AIRPORT

DANBURY MUNICIPAL AIRPORT: HEAD SOUTH ON SUGAR HOLLOW ROAD TOWARD MIRY BROOK ROAD, TAKE THE 1ST LEFT ONTO MIRY BROOK ROAD/WOOSTER HEIGHTS, TURN LEFT TO MERGE ONTO US-7 N TOWARD I-84 N, TAKE EXIT 4 FOR US-6 W/US-202 W/LAKE AVENUE, TURN RIGHT AT US-202 W/US-6 W/LAKE AVENUE EXTENSION, TURN RIGHT AT MILL RIDGE ROAD, TAKE THE 2ND RIGHT ONTO HIGH RIDGE ROAD, TAKE THE 1ST RIGHT TO STAY ON HIGH RIDGE ROAD, TURN LEFT AT SCUCCO ROAD, TAKE THE 1ST RIGHT ONTO BOXWOOD LANE, DESTINATION WILL BE ON THE LEFT.



OVERALL SITE PLAN
NO SCALE

Sprint

6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

BLACK & VEATCH

10950 GRANDVIEW DRIVE
OVERLAND PARK, KANSAS 66210
(913) 458-2000

PROJECT NO:	168202
DRAWN BY:	AKJ
CHECKED BY:	MB

REV	DATE	DESCRIPTION
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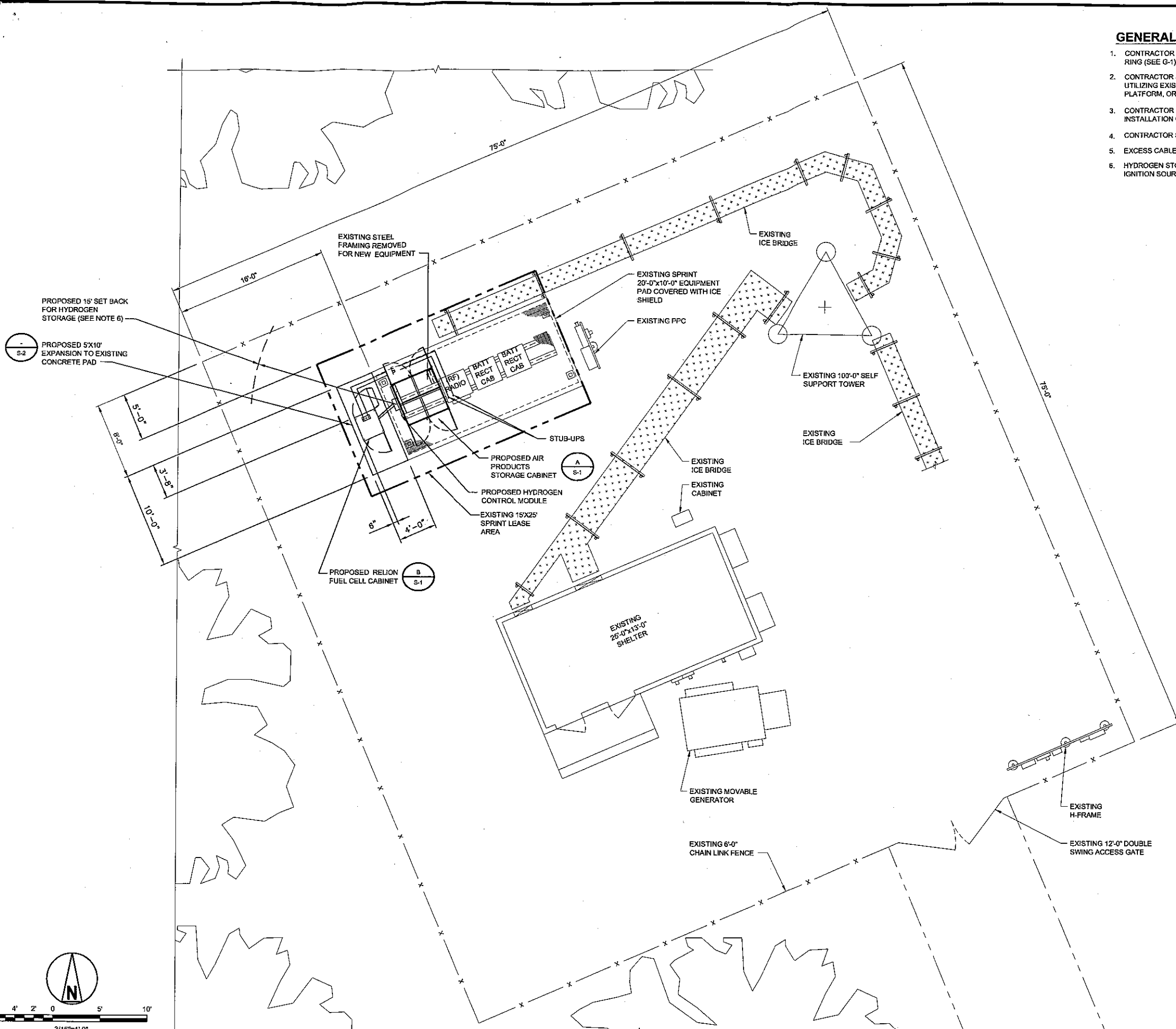


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DANBURY-W. CT. UNIV.
CT43XC836
303 BOXWOOD LANE
DANBURY, CT 06810
CO-LOCATION

SHEET TITLE
OVERALL SITE PLAN

SHEET NUMBER
C-1



GENERAL NOTES:

1. CONTRACTOR SHALL GROUND ALL NEW EQUIPMENT TO THE NEAREST GROUND RING (SEE G-1).
2. CONTRACTOR SHALL ROUTE CONDUIT TO AVOID TRIP HAZARDS BY EITHER UTILIZING EXISTING CABLE TRAY, OVERHEAD ICE BRIDGE, UNDERNEATH RAISED PLATFORM, OR AROUND EDGE OF CONCRETE PAD.
3. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF ALL NEW EQUIPMENT.
4. CONTRACTOR SHALL VERIFY THE ALARM CABLES ARE OF SUFFICIENT LENGTH.
5. EXCESS CABLES SHALL BE LACED IN A NEAT AND ORGANIZED MANNER.
6. HYDROGEN STORAGE CABINET HAS A REQUIRED SET BACK OF 15' FROM IGNITION SOURCES & AIR INTAKES.



6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

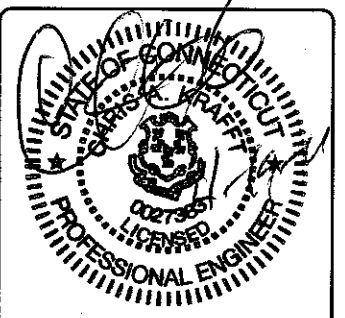


BLACK & VEATCH

10950 GRANDVIEW DRIVE
OVERLAND PARK, KANSAS 66210
(913) 458-2000

PROJECT NO:	168202
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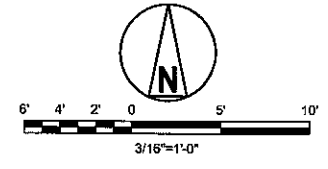
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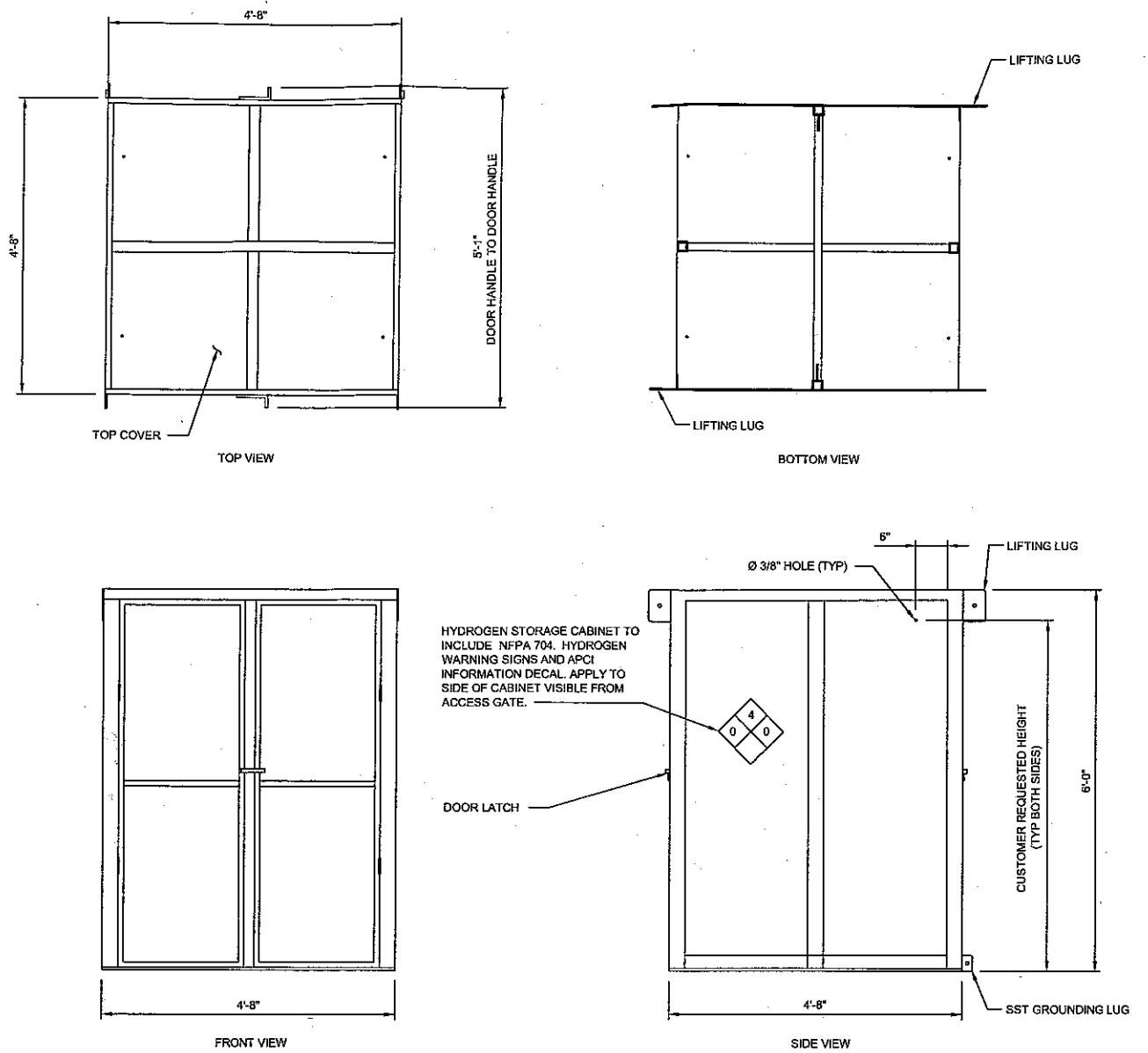
DANBURY-W. CT. UNIV.
CT43XC836
303 BOXWOOD LANE
DANBURY, CT 06810
CO-LOCATION

SHEET TITLE
SITE PLAN

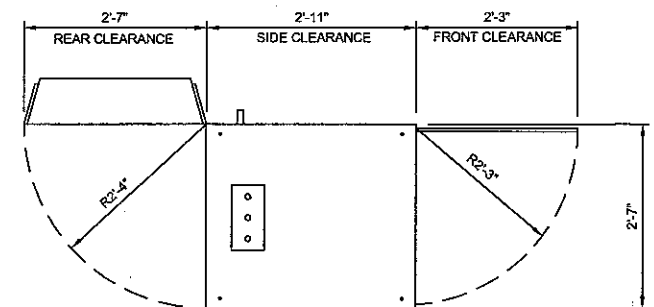
SHEET NUMBER
C-2

SITE PLAN

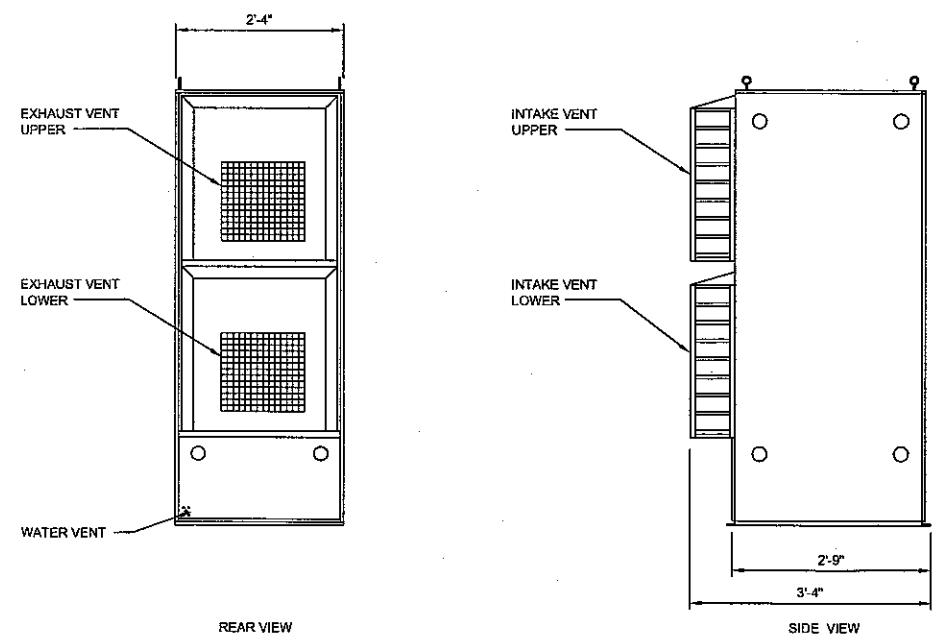




DETAIL A
HYDROGEN STORAGE CABINET
SCALE: 3/4" = 1'-0"



TOP VIEW CLEARANCE
(DOOR OPEN)



DETAIL B
FUEL CELL CABINET
SCALE: 3/4" = 1'-0"



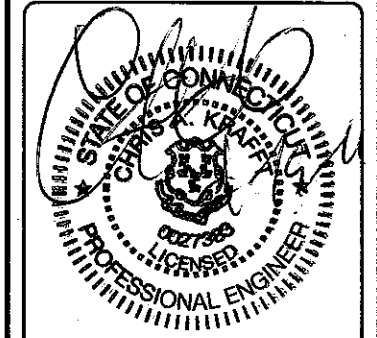
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251



10950 GRANDVIEW DRIVE
OVERLAND PARK, KANSAS 66210
(913) 458-2000

PROJECT NO:	168202
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DANBURY-W. CT. UNIV.
CT43XC836
303 BOXWOOD LANE
DANBURY, CT 06810
CO-LOCATION

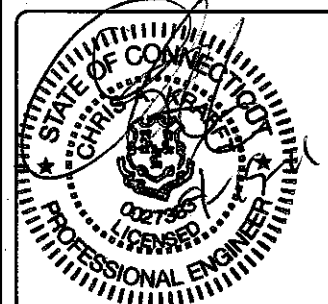
SHEET TITLE
**EQUIPMENT CABINET
DETAILS**

SHEET NUMBER
S-1



PROJECT NO:	168202
DRAWN BY:	AKJ
CHECKED BY:	MB

REV	DATE	DESCRIPTION
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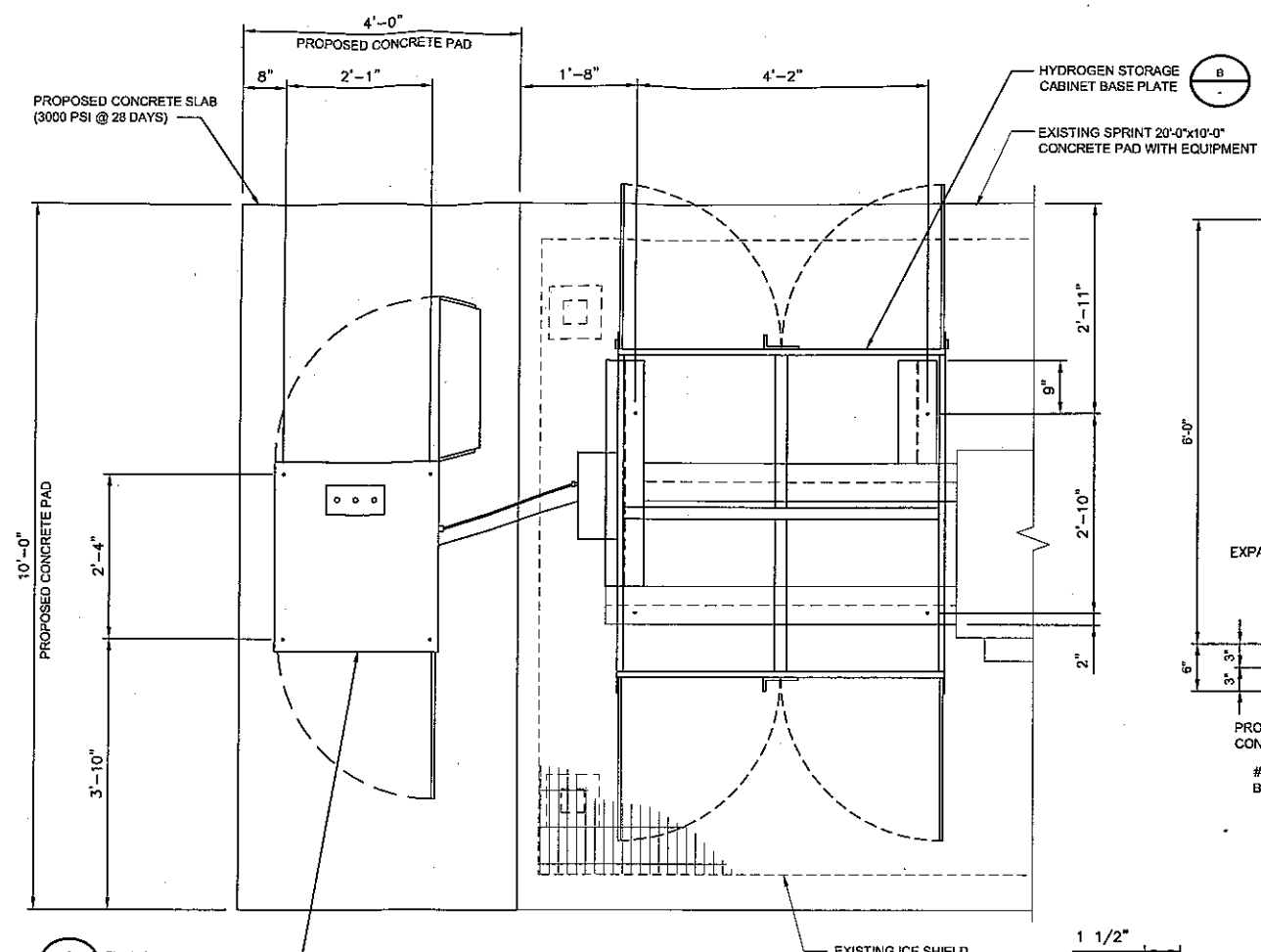


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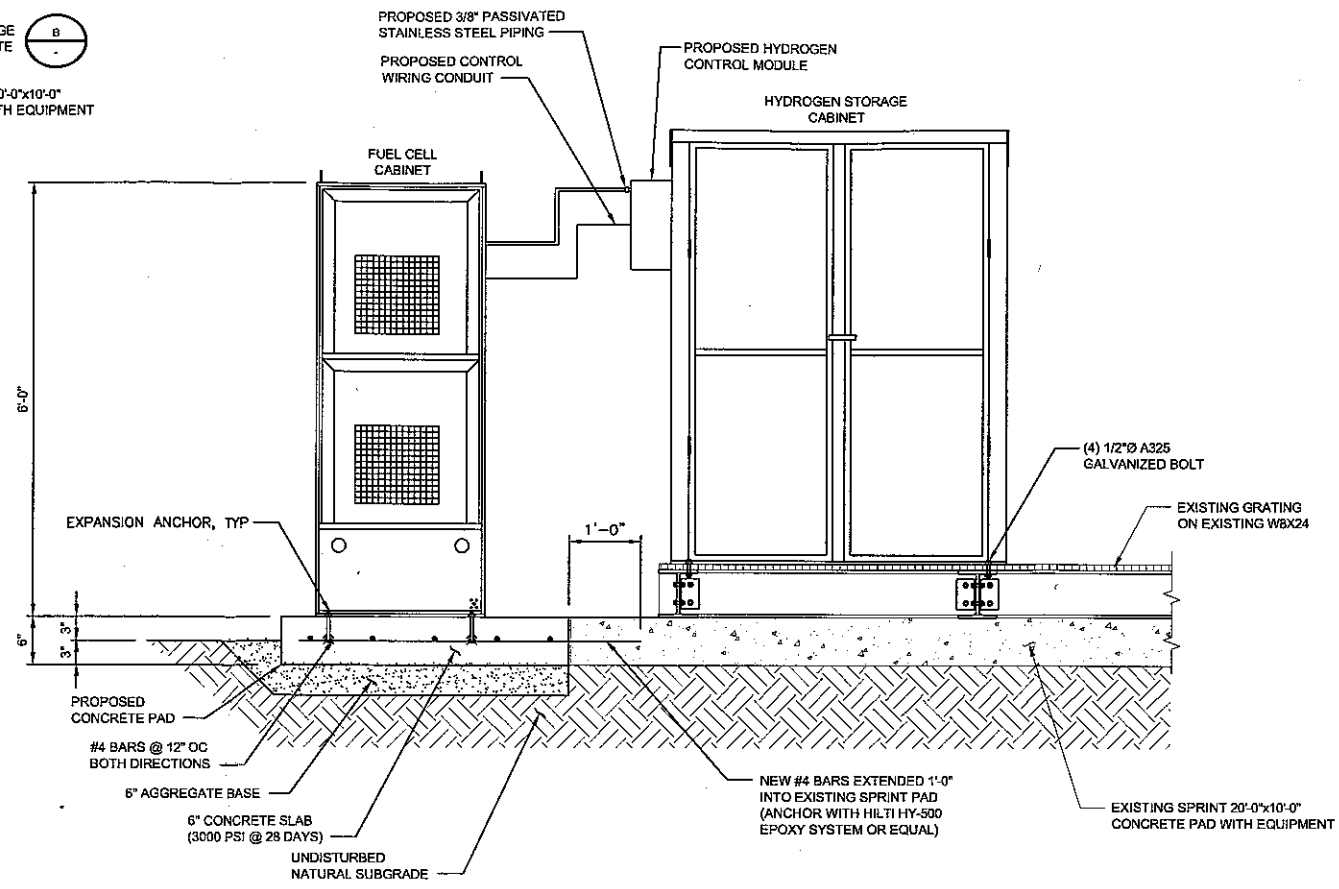
DANBURY-W. CT. UNIV.
CT43XC836
303 BOXWOOD LANE
DANBURY, CT 06810
CO-LOCATION

SHEET TITLE
CONCRETE PAD DETAILS

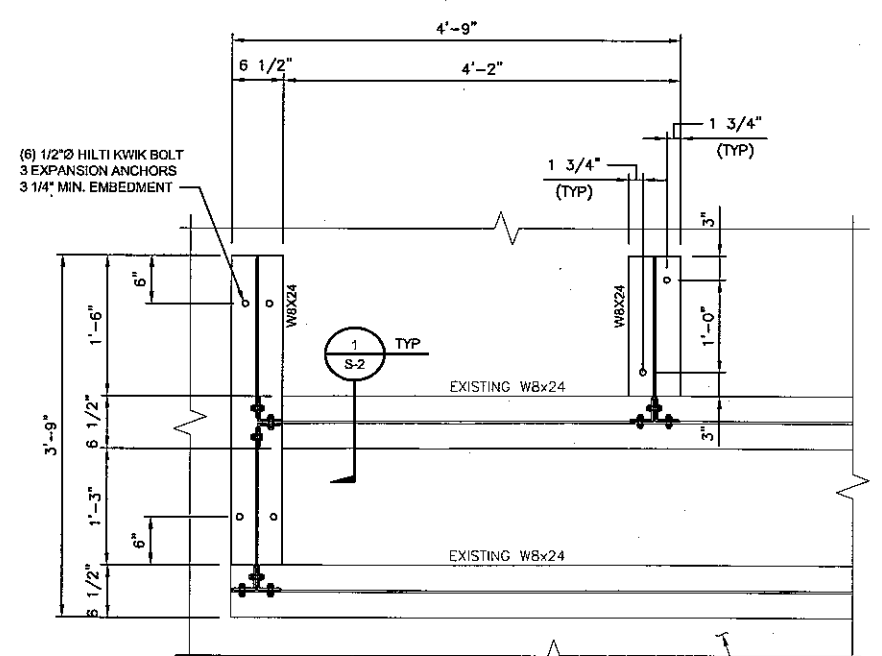
SHEET NUMBER
S-2



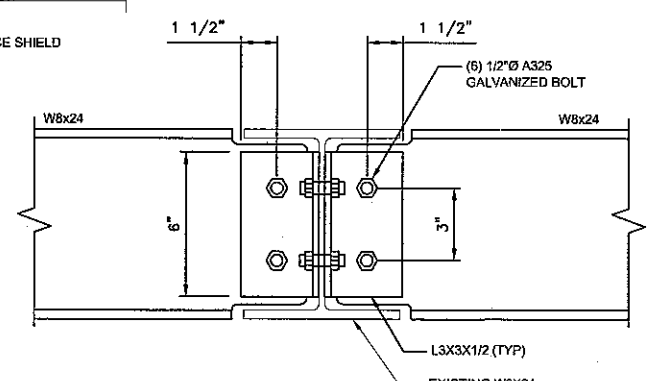
PLAN VIEW CONCRETE PAD
SCALE: 3/4" = 1'-0"



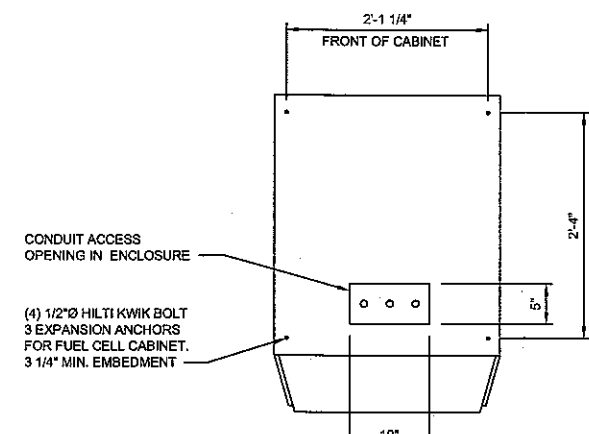
ELEVATION CONCRETE PAD
SCALE: 3/4" = 1'-0"



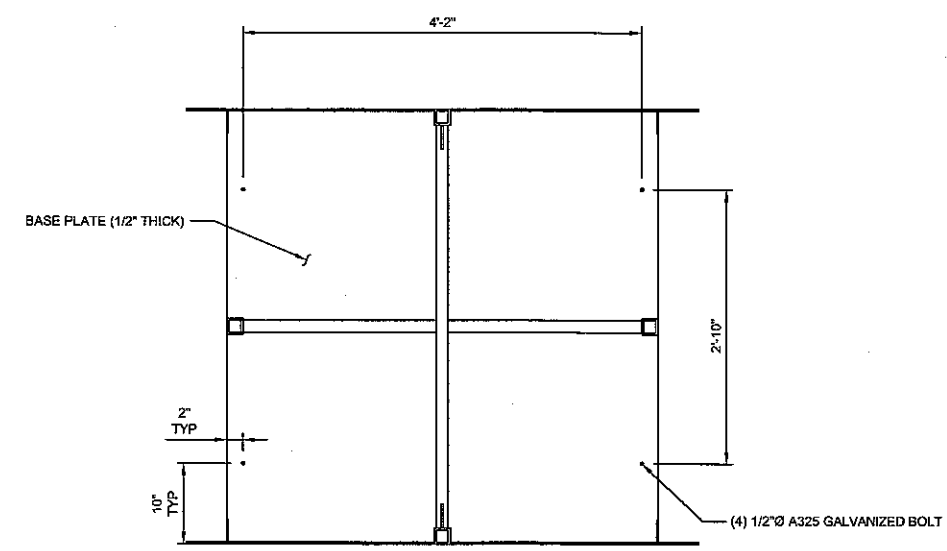
PLAN VIEW STEEL FRAMING
SCALE: 1" = 1'-0"



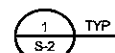
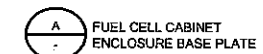
SECTION 1
SCALE: 3" = 1'-0"



DETAIL A
CABINET BOLT PATTERN
SCALE: 1" = 1'-0"



DETAIL B
HYDROGEN STORAGE CABINET BOLT PATTERN
SCALE: 1" = 1'-0"





6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

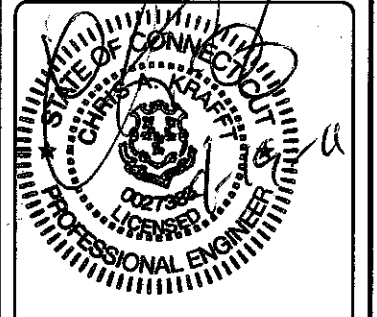


BLACK & VEATCH

10950 GRANDVIEW DRIVE
OVERLAND PARK, KANSAS 66210
(913) 458-2000

PROJECT NO: 168202
DRAWN BY: AKJ
CHECKED BY: MB

REV	DATE	DESCRIPTION
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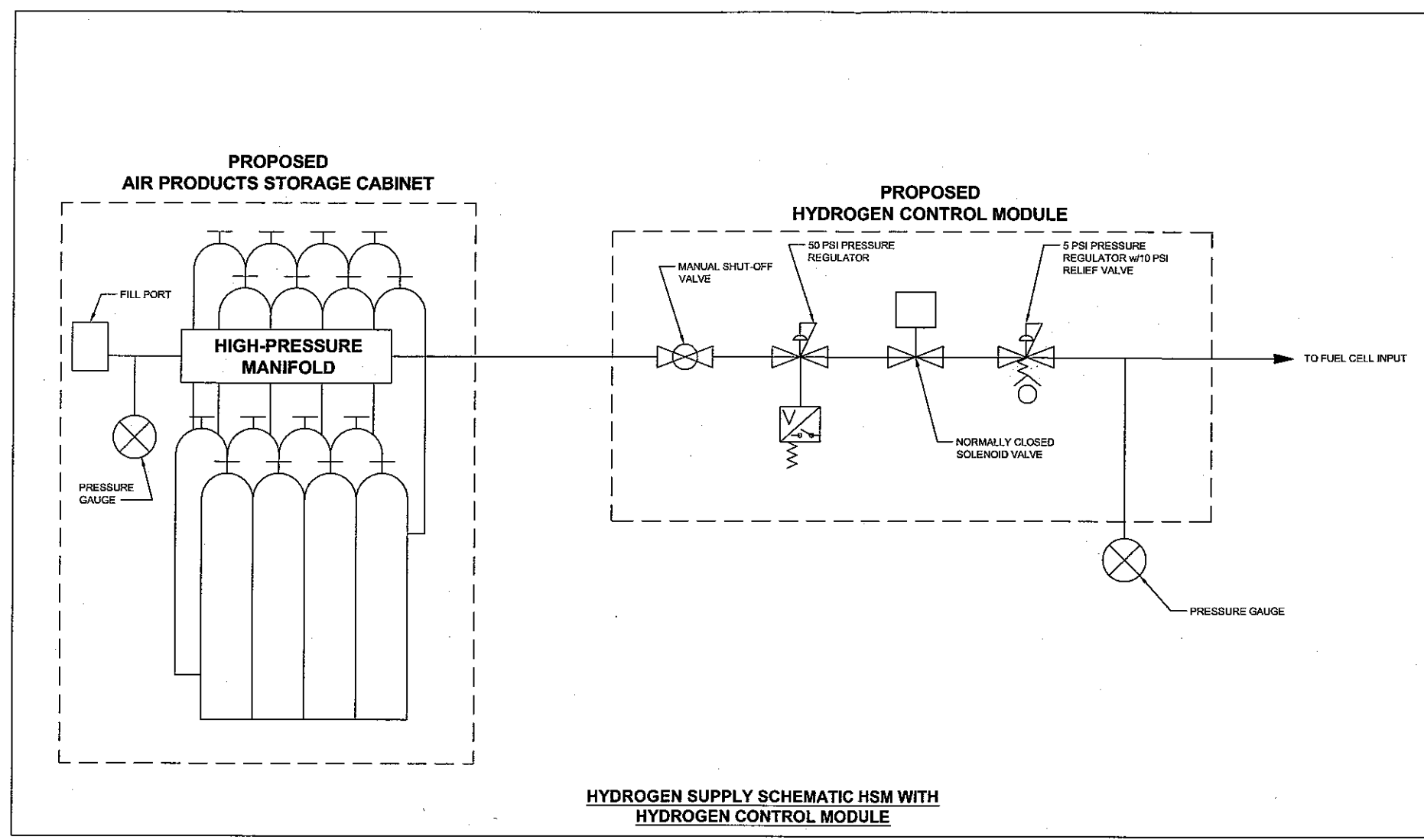


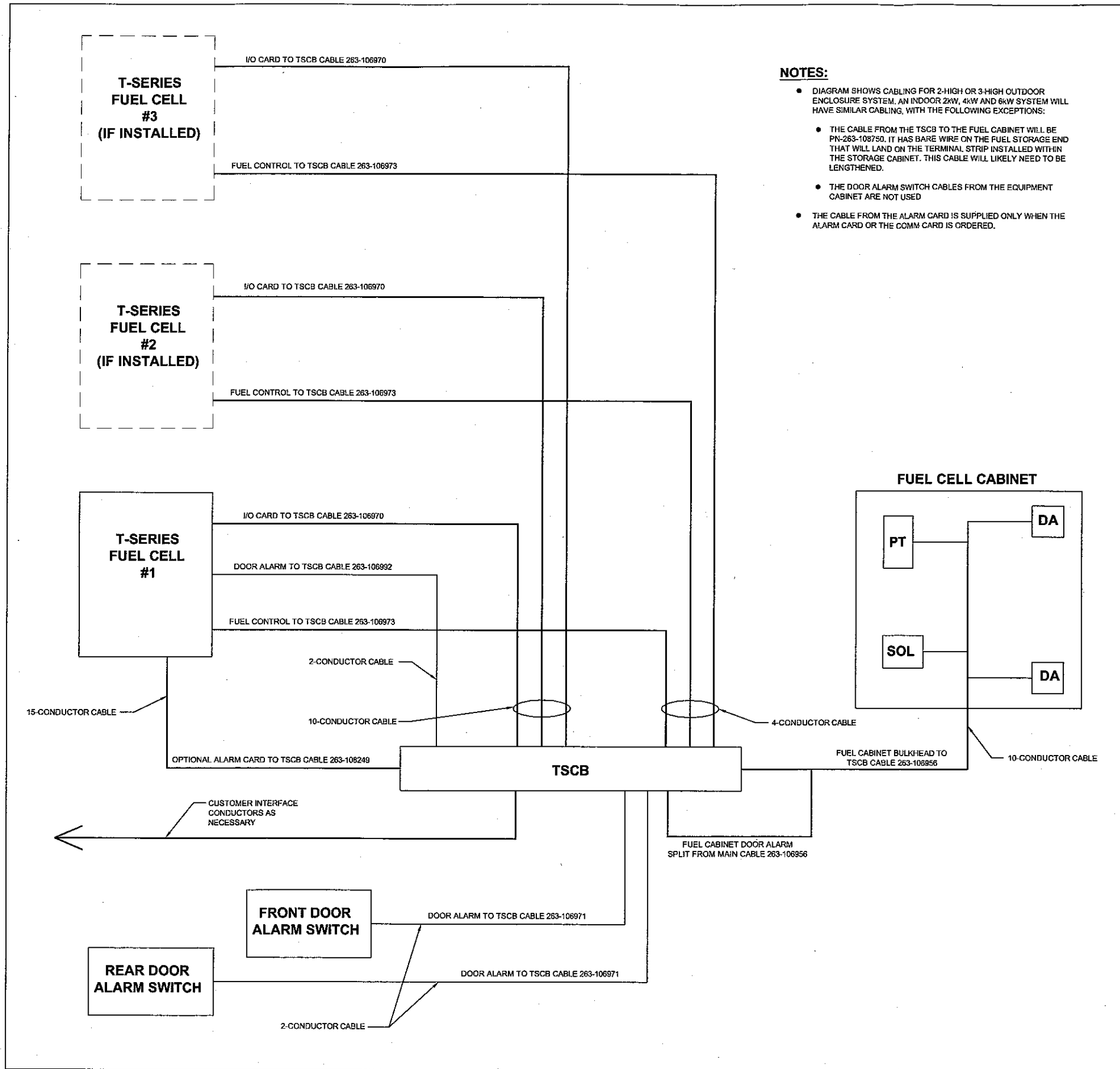
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DANBURY-W. CT. UNIV.
CT43XC836
303 BOXWOOD LANE
DANBURY, CT 06810
CO-LOCATION

SHEET TITLE
HYDROGEN PIPING SCHEMATIC

SHEET NUMBER
M-1





NOTES:

- DIAGRAM SHOWS CABLING FOR 2-HIGH OR 3-HIGH OUTDOOR ENCLOSURE SYSTEM. AN INDOOR 2KW, 4KW AND 6KW SYSTEM WILL HAVE SIMILAR CABLING, WITH THE FOLLOWING EXCEPTIONS:
- THE CABLE FROM THE TSCB TO THE FUEL CABINET WILL BE PN-263-108750. IT HAS BARE WIRE ON THE FUEL STORAGE END THAT WILL LAND ON THE TERMINAL STRIP INSTALLED WITHIN THE STORAGE CABINET. THIS CABLE WILL LIKELY NEED TO BE LENGTHENED.
- THE DOOR ALARM SWITCH CABLES FROM THE EQUIPMENT CABINET ARE NOT USED
- THE CABLE FROM THE ALARM CARD IS SUPPLIED ONLY WHEN THE ALARM CARD OR THE COMM CARD IS ORDERED.

GENERAL ELECTRICAL NOTES:

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), AND LOCAL CODES.
2. ALL ELECTRICAL MATERIALS, EQUIPMENT AND INSTALLATION PROCEDURES SHALL CONFORM WITH SPRINT'S STANDARD CONSTRUCTION SPECIFICATIONS.
3. ALL MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA NFPA, AND "UL" LISTED.
4. THE ELECTRICAL PLANS, DETAILS, AND DIAGRAMS SHOWN ON THESE DRAWINGS ARE DIAGRAMMATIC ONLY. ACTUAL FIELD CONDITIONS AND SITE REQUIREMENTS SHALL DICTATE THE AMOUNT AND LOCATION OF EQUIPMENT.
5. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY THE NEC AND ALL APPLICABLE LOCAL CODES.
6. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE A MINIMUM INTERRUPTING RATING OF 65,000 AIC (UNLESS NOTED OTHERWISE).
7. REFER TO THE VENDOR DRAWINGS OF THE PPC CABINET, BATTERY, AND BTS CABINETS FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT.
8. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL INSTALLATION.
9. LABEL ALL ELECTRICAL EQUIPMENT PER SPRINT'S SPECIFICATIONS.
10. ALL SINGLE-PHASE SELF-CONTAINED METER CONNECTION DEVICES MUST INCLUDE HORN TYPE BYPASS PROVISIONS SO THAT SERVICE WILL NOT BE INTERRUPTED WHEN A METER IS REMOVED FROM THE SOCKET.
11. USE METER CONNECTION DEVICES LABELED BY THE MANUFACTURER WITH THE LETTERS "CECHA".
12. ALL INTERIOR CONDUITS AND BUSHINGS SHALL BE EMT. ALL EXTERIOR SHALL BE PVC UNLESS NOTED OTHERWISE (SEE SPRINT'S STANDARD CONSTRUCTION SPECIFICATIONS).
13. PROVIDE 2 PULL STRINGS SECURELY FASTENED AT EACH END OF ALL CONDUITS. THE PULL STRINGS ARE TO BE 200 L.B. TEST POLYETHYLENE CORD. PROVIDE CAP ON THE END OF EACH CONDUIT AND MARK AS SHOWN ON THIS SITE PLAN.
14. THE CONTRACTOR SHALL LOCATE AND MARK ALL EXISTING UNDERGROUND POWER, TELCO, GROUNDING CONDUITS, AND ALL OTHER UTILITIES EASEMENTS AND/OR WIRES PRIOR TO TRENCHING. ANY DAMAGE CAUSED TO THE EXISTING UNDERGROUND SERVICES OR SYSTEMS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. VERIFY WITH UTILITY NEW SERVICE HAS BEEN APPLIED FOR. THERE SHALL BE NO SPLICING OF GROUND CONDUCTORS BELOW GRADE.
15. UTILITY RACK AND CONDUIT SIZES TO BE FIELD DETERMINED BY CONTRACTOR IN ACCORDANCE WITH THE LOCAL JURISDICTION.
16. ALL WORK SHALL MEET OR EXCEED ALL APPLICABLE LOCAL AND NATIONAL ELECTRICAL CODE REQUIREMENTS.
17. ALL INSTALLATION AND EQUIPMENT SHALL MEET OR EXCEED SPRINT CONSTRUCTION SPECIFICATIONS.

ELECTRICAL NOTES:

1. LIGHT SHADED LINES INDICATE EXISTING CONSTRUCTION.
2. CONTRACTOR TO VERIFY POWERWAVE MODEL AND ASSOCIATED POWER REQUIREMENTS. IF LARGER CIRCUIT BREAKERS ARE REQUIRED, CONTRACTOR SHALL PROVIDE CORRECT ELECTRICAL CONDUCTOR SIZES.



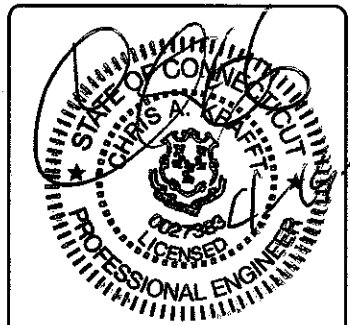
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251



10950 GRANDVIEW DRIVE
OVERLAND PARK, KANSAS 66210
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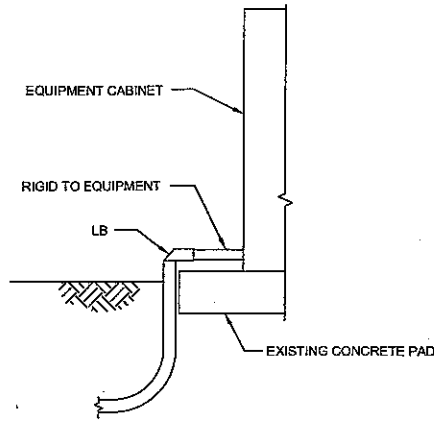
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DANBURY-W. CT. UNIV.
CT43XC836
303 BOXWOOD LANE
DANBURY, CT 06810
CO-LOCATION

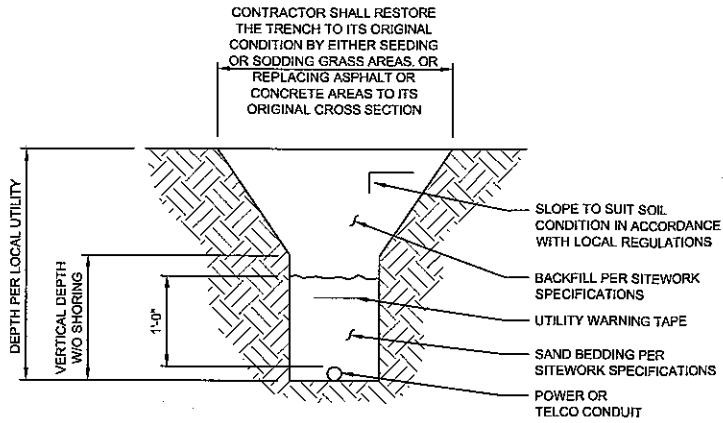
SHEET TITLE
ELECTRICAL ONE-LINE DIAGRAM

SHEET NUMBER
E-1

T-SERIES SIGNAL INTERCONNECT DIAGRAM



DETAIL A
STUB UP DETAIL
NO SCALE

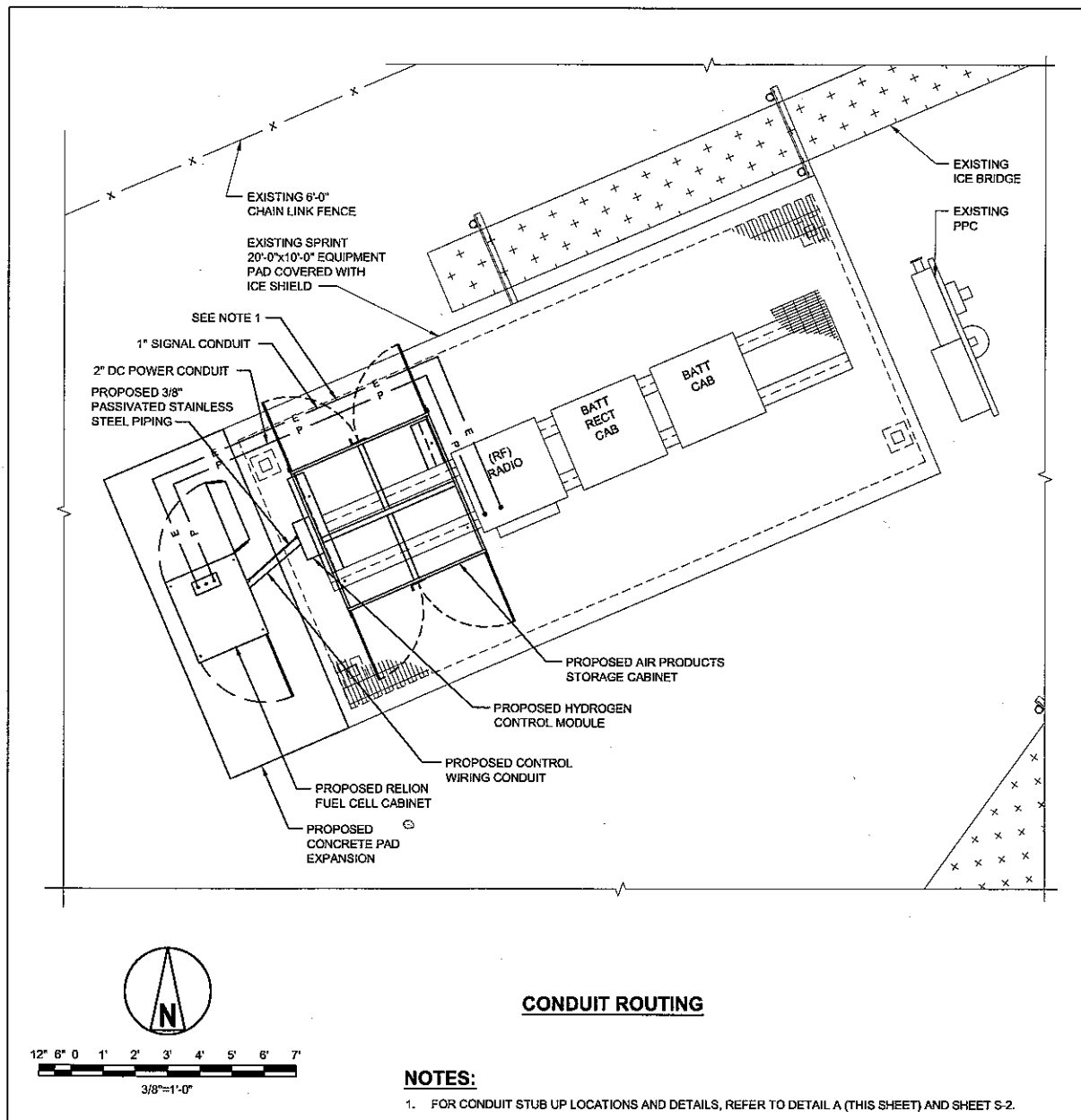


TYPICAL UTILITY
TRENCH DETAIL
NO SCALE

"ONE CALL" SERVICE SHALL BE CALLED PRIOR TO EXCAVATION

GENERAL NOTES:

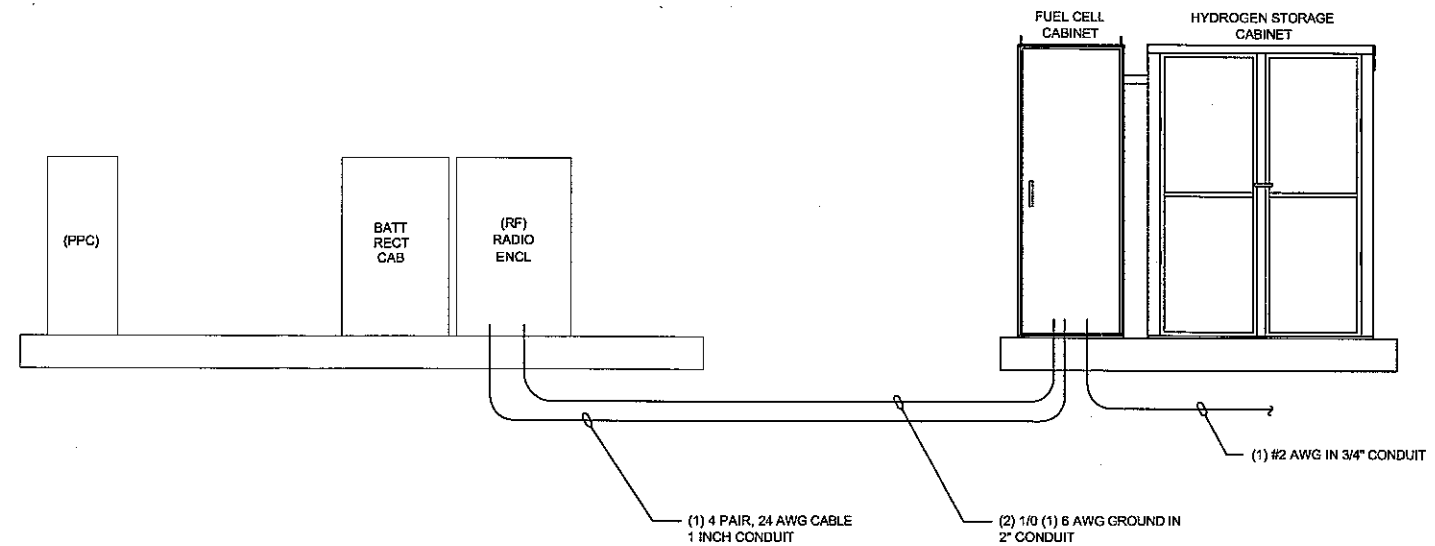
1. MATERIALS: ALL HANGERS, SUPPORTS, FASTENERS AND HARDWARE SHALL BE ZINC COATED OR OF EQUIVALENT CORROSION RESISTANCE BY TREATMENT OR INHERENT PROPERTY, AND SHALL BE MANUFACTURED PRODUCTS DESIGNED FOR THE APPLICATION. PRODUCTS FOR OUTDOOR USE SHALL BE HOT DIP GALVANIZED.
2. CONDUIT SEALS: INSTALL CONDUIT SEAL FOR EACH CONDUIT PENETRATING AN EXTERIOR BUILDING WALL BELOW GRADE (UNLESS PENETRATION IS BELOW LOWEST BUILDING FLOOR SLAB), AND ELSEWHERE AS INDICATED, AND SO AS TO ACHIEVE A SEALED WATERTIGHT INSTALLATION. MATCH EXISTING CONDITIONS AND MEET OR EXCEED INTEGRITY OF WALLS.
3. INSTALLATION: RIGIDLY SUPPORT AND SECURE ALL MATERIALS, RACEWAY AND EQUIPMENT TO BUILDING STRUCTURE USING HANGERS, SUPPORTS AND FASTENERS, SUITABLE FOR THE USE, MATERIALS AND LOADS ENCOUNTERED. PROVIDE ALL NECESSARY HARDWARE. PROVIDE CONDUIT SUPPORTS AT MAXIMUM 5 FT. O.C.
4. STRUCTURAL MEMBERS: DO NOT CUT, DRILL OR WELD ANY STRUCTURAL MEMBER EXCEPT AS SPECIFICALLY APPROVED BY THE ENGINEER.
5. INDEPENDENT SUPPORT: DO NOT SUPPORT MATERIALS OR EQUIPMENT FROM OTHER EQUIPMENT, PIPING, DUCTWORK OR SUPPORTS FOR SAME.
6. MISCELLANEOUS SUPPORTS: PROVIDE ANY ADDITIONAL STRUCTURAL SUPPORT STEEL BRACKETS ANGLES, FASTENERS AND HARDWARE AS REQUIRED TO ADEQUATELY SUPPORT ALL ELECTRICAL MATERIALS AND EQUIPMENT.
7. ONE HOLE STRAPS SHALL NOT BE USED FOR CONDUITS LARGER THAN 3/4"Ø.



CONDUIT ROUTING

NOTES:

1. FOR CONDUIT STUB UP LOCATIONS AND DETAILS, REFER TO DETAIL A (THIS SHEET) AND SHEET S-2.



ELECTRICAL & SIGNAL RISER DIAGRAM



6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

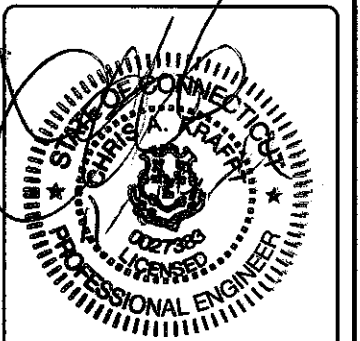


BLACK & VEATCH

10950 GRANDVIEW DRIVE
OVERLAND PARK, KANSAS 66210
(913) 458-2000

PROJECT NO:	168202
DRAWN BY:	AKJ
CHECKED BY:	MB

REV	DATE	DESCRIPTION
0	04/18/11	ISSUED FOR CONSTRUCTION



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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CT43XC836
303 BOXWOOD LANE
DANBURY, CT 06810
CO-LOCATION

SHEET TITLE
OVERALL CONDUIT
DETAILS

SHEET NUMBER

E-2



6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251



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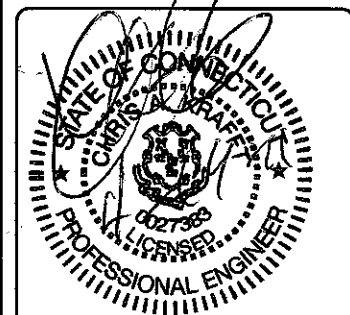
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PROJECT NO: 168202

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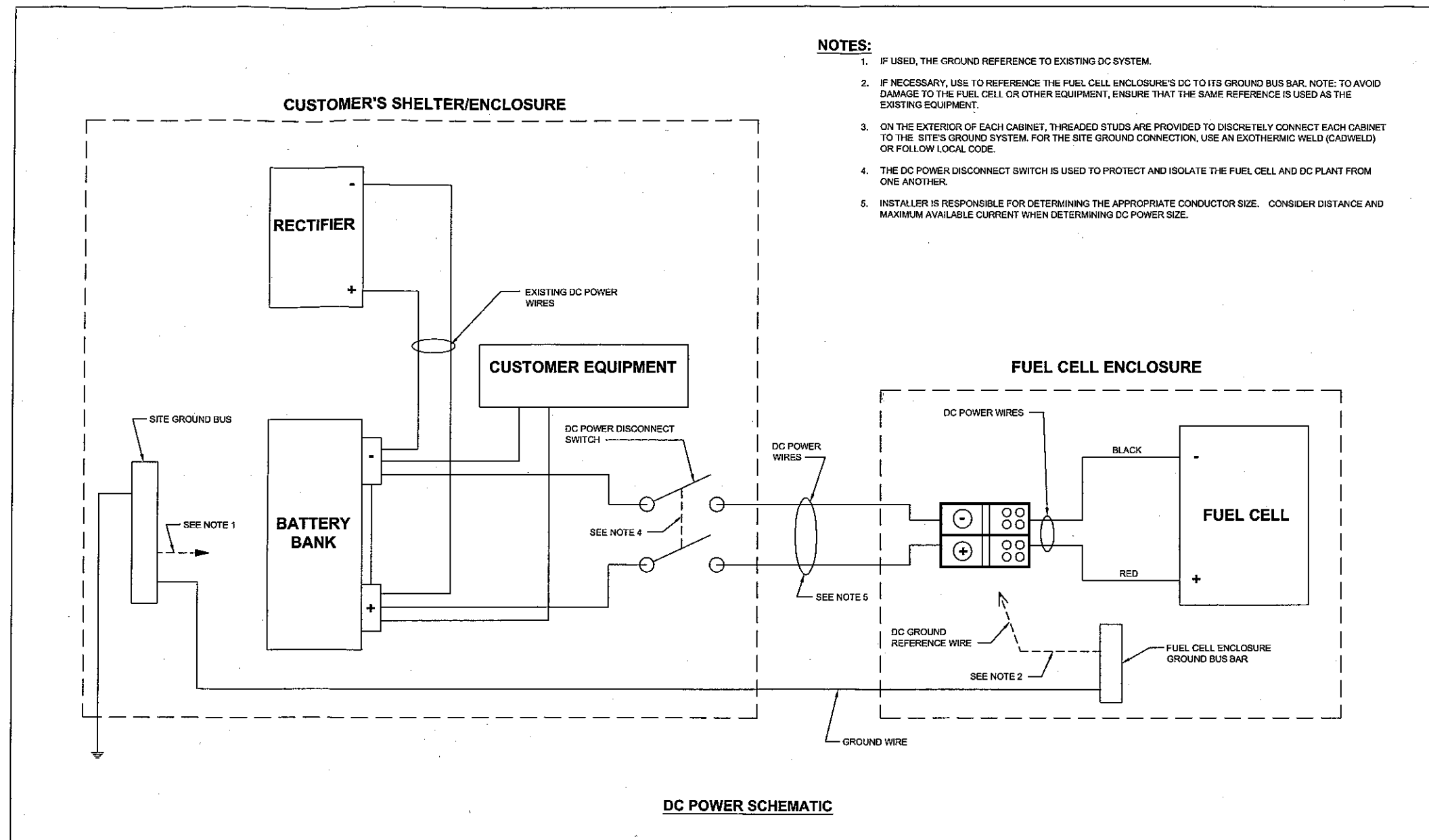


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CO-LOCATION

SHEET TITLE
**ELECTRICAL
WIRING DIAGRAM**

SHEET NUMBER
E-3





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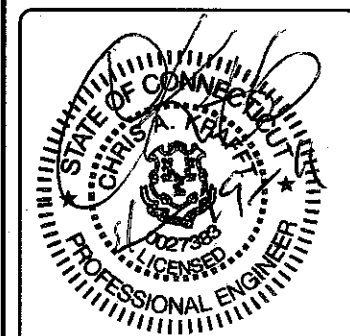
10950 GRANDVIEW DRIVE
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CO-LOCATION

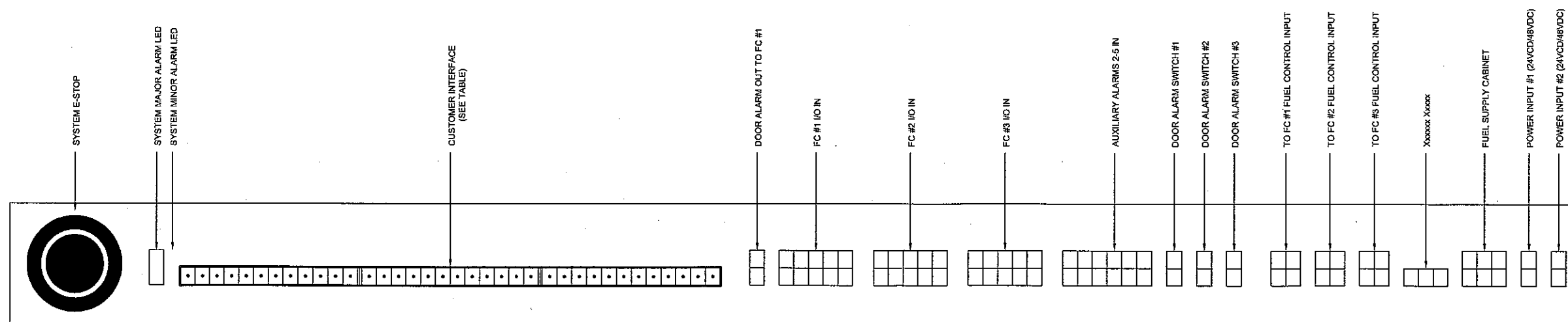
SHEET TITLE
**FUEL CELL INSTALL
DETAIL**

SHEET NUMBER

E-4

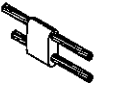


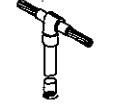


CUSTOMER CONNECTIONS

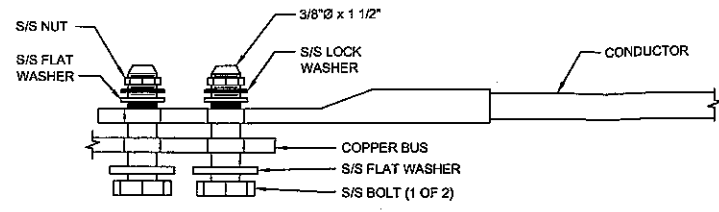
PIN	SIGNAL NAME	NOTES	PIN	SIGNAL NAME	NOTES	PIN	SIGNAL NAME	NOTES
1	DOOR SWITCH ALARM	THERE IS 1.1 k OHM SERIES RESISTANCE BETWEEN PINS 1 & 2	13	FC #1 AUX. ALARM RELAY (N.O.)	THERE IS 1.1 k OHM SERIES RESISTANCE BETWEEN PINS 1 & 2	25	AUX. 2 ALARM RELAY (N.O.)	AUXILIARY RELAYS 2 THROUGH 5 ARE AVAILABLE WITH THE ADDITION OF AN OPTIONAL ALARM CARD OR COMM CARD INSTALLED ONTO ONE OF THE FUEL CELLS
2	DOOR SWITCH ALARM RETURN		14	FC #1 AUX. ALARM RELAY (COMMON)		26	AUX. 2 ALARM RELAY (COMMON)	
3	NOT USED	15	FC #1 AUX. ALARM RELAY (N.C.)	27	AUX. 2 ALARM RELAY (N.C.)			
4	NOT USED	16	FC #2 AUX. ALARM RELAY (N.O.)	28	AUX. 2 ALARM RELAY (N.C.)			
5	SYSTEM MAJOR ALARM (N.O.)	17	FC #2 AUX. ALARM RELAY (COMMON)	29	AUX. 3 ALARM RELAY (COMMON)			
6	SYSTEM MAJOR ALARM (COMMON)	18	FC #2 AUX. ALARM RELAY (N.C.)	30	AUX. 3 ALARM RELAY (N.C.)			
7	SYSTEM MAJOR ALARM (N.C.)	19	FC #3 AUX. ALARM RELAY (N.O.)	31	AUX. 3 ALARM RELAY (N.O.)			
8	SYSTEM MINOR ALARM (N.O.)	20	FC #3 AUX. ALARM RELAY (COMMON)	32	AUX. 4 ALARM RELAY (COMMON)			
9	SYSTEM MINOR ALARM (COMMON)	21	FC #3 AUX. ALARM RELAY (N.C.)	33	AUX. 4 ALARM RELAY (N.C.)			
10	SYSTEM MINOR ALARM (N.C.)	22	PRESSURE SW ALARM RELAY (N.O.)	34	AUX. 5 ALARM RELAY (N.O.)			
11	CONTACT START	THESE ARE WETTED CONTACTS; USE A CLOSED SWITCH TO ACTIVATE.	23	PRESSURE SW ALARM RELAY (COMMON)	35	AUX. 5 ALARM RELAY (COMMON)		
12	CONTACT START RETURN		24	PRESSURE SW ALARM RELAY (N.C.)	36	AUX. 5 ALARM RELAY (N.C.)		



T-SERIES SIGNAL AND CONTROL CONNECTIONS

THE DETAILS ON THIS SHEET APPLY ONLY AS CALLED OUT ON SITE PLANS OR SITE SPECIFIC DRAWINGS.

CADWELD CONNECTIONS OR APPROVED EQUAL		BURNDY CONNECTIONS OR APPROVED EQUAL
 <p>PARALLEL HORIZONTAL CONDUCTORS PARALLEL THROUGH CONNECTION OF HORIZONTAL CABLES TYPE PT</p>	 <p>HORIZONTAL STEEL SURFACE TO FLAT STEEL SURFACE OR HORIZONTAL PIPE TYPE HS</p>	 <p>BOND JUMPER FIELD FABRICATED GREEN STRANDED INSULATED TYPE 2-YA-2</p>
 <p>THROUGH CABLE TO GROUND ROD THROUGH CABLE TO TOP OF GROUND ROD TYPE GT</p>	 <p>VERTICAL STEEL SURFACE CABLE DOWN AT 45° TO VERTICAL STEEL SURFACE INCLUDING PIPE TYPE VS</p>	 <p>COPPER LUGS TWO HOLE - LONG BARREL LENGTH TYPE YA-2</p>

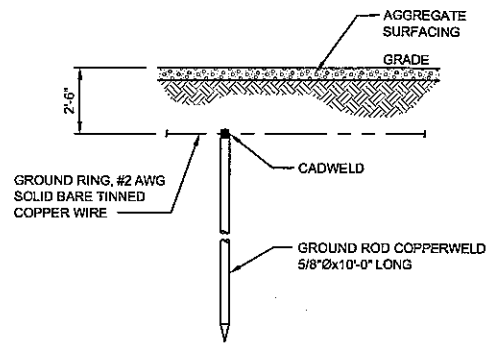


LUG DETAIL
NO SCALE

- NOTES:**
- ALL HARDWARE 18-8 STAINLESS STEEL COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
 - FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH ANTI-OXIDATION COMPOUND (BURNDY PENETROX E, OR THOMAS & BETTS KOPR-SHIELD).

GROUNDING NOTES:

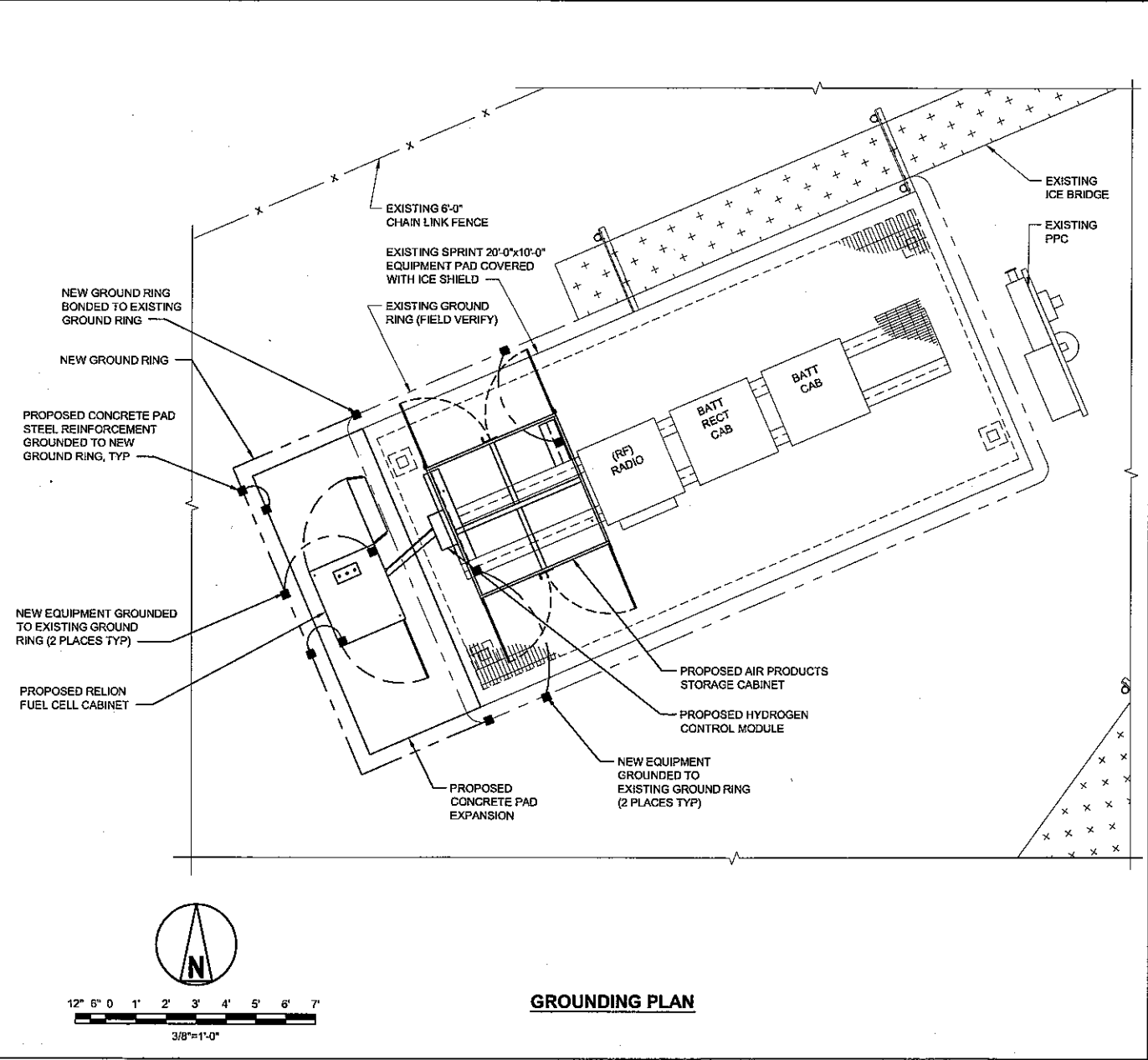
- THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
- ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
- ALL EXTERIOR GROUNDING CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
- ALL EXTERIOR GROUNDING CONDUCTORS SHALL BE 2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
- CONNECTIONS TO THE GROUNDING BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
- USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
- MAXIMUM RESISTANCE OF THE COMPLETED GROUND SYSTEM SHALL NOT EXCEED 5 OHMS. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR FACILITY GROUNDING, USING FALL OF POTENTIAL METHOD.



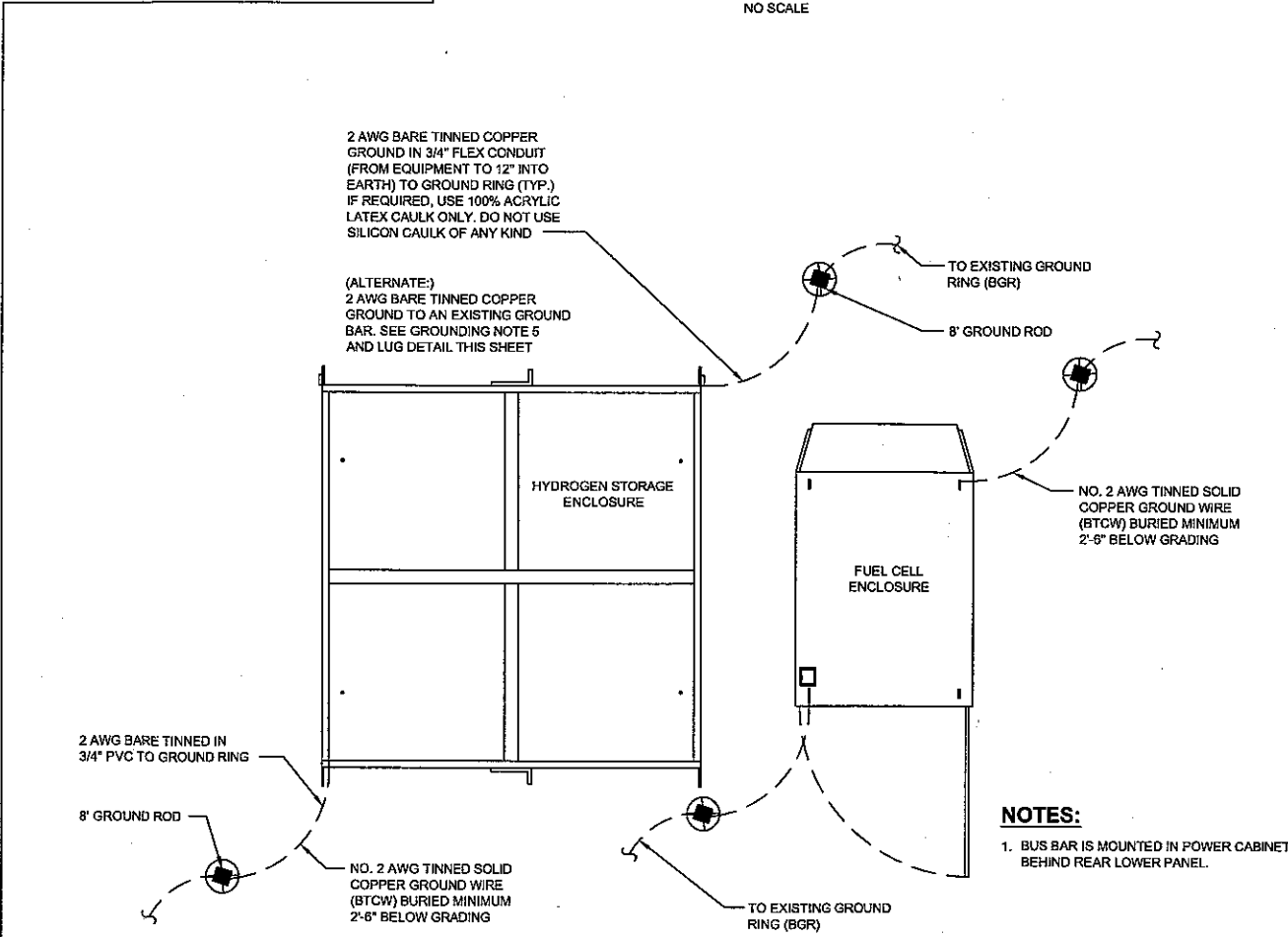
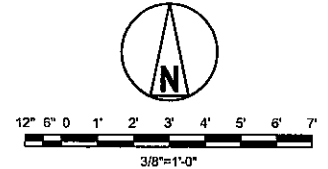
GROUND ROD DETAIL
NO SCALE

GROUNDING LEGEND

- EXISTING GROUND RING
- NEW GROUND ROD
- CADWELD CONNECTION (EXOTHERMIC WELD)
- NEW GROUND RING



GROUNDING PLAN



HYDROGEN TANKS AND ENGINE STAND ALONE GROUNDING DETAIL (IF APPLICABLE)

- NOTES:**
- BUS BAR IS MOUNTED IN POWER CABINET BEHIND REAR LOWER PANEL.



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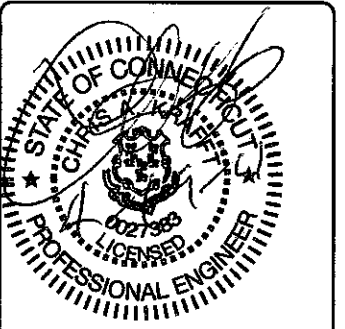
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CO-LOCATION

SHEET TITLE
GROUNDING PLAN AND DETAILS

SHEET NUMBER

G-1