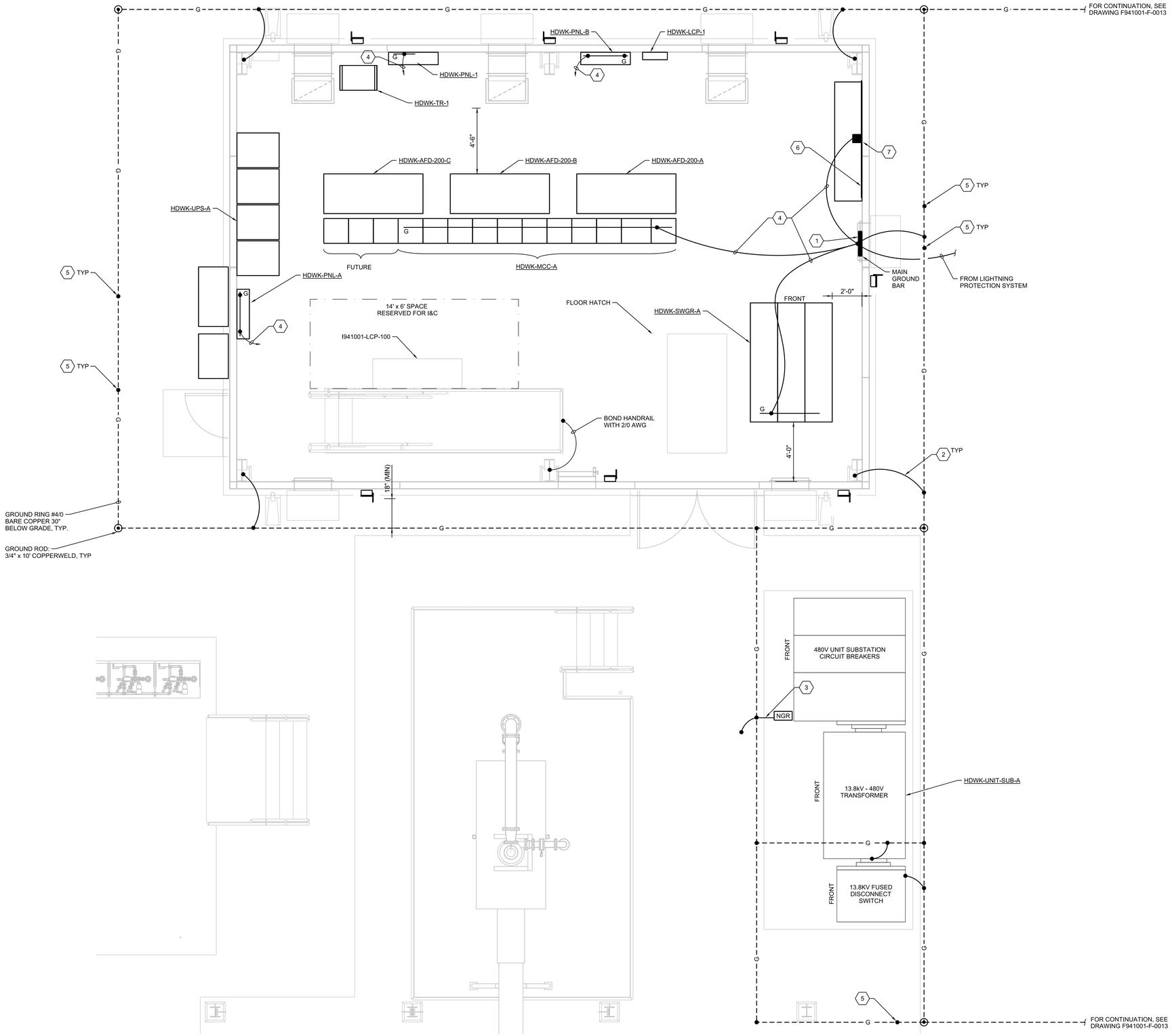

HEADWORKS ELECTRICAL GROUNDING PLAN

3/8"=1'-0"

GENERAL NOTES

A. FOR BONDING CONNECTIONS TO REINFORCING STEEL, USE 4/0 AWG BARE COPPER WIRE. EXCEPT AS NOTED, USE 2/0 AWG (MINIMUM) COPPER WIRE FOR ALL OTHER CONNECTIONS.

B. USE EXOTHERMIC WELDING FOR ALL BURIED OR CONCRETE-ENCASED CONNECTIONS. FOR ALL OTHER CONNECTIONS, USE BOLTED CONNECTIONS WITH COMPRESSION WIRE LUGS OR EXOTHERMIC WELDING.

C. COORDINATE LOCATIONS OF BONDING PIGTAILS WITH LOCATION AND ARRANGEMENT OF STRUCTURES, EQUIPMENT, AND LIKELY ROUTES OF PERSONNEL TRAVEL. RE-ROUTE OR REPLACE GROUNDING CONNECTIONS THAT PRESENT TRIPPING HAZARDS.

SHEET KEYNOTES

1. MAIN GROUND BAR: 4"x20", WITH NEMA STANDARD DRILLING, WITH 2000V STANDOFF INSULATORS. COOPER INDUSTRIES SBTMGB20K OR SIMILAR. ATTACHED TO WALL 18 INCHES AFF.
2. BOND TO BUILDING COLUMNS AS SHOWN. USE 2/0 AWG COPPER; CONNECT WITH EXOTHERMIC WELD. PROTECT WIRE WITH ABRASION AND WEATHER - RESISTANT SEAL WHERE IT PASSES THROUGH STRUCTURE.
3. BOND TO UNIT SUBSTATION EQUIPMENT. USE 2/0 AWG COPPER. COORDINATE WITH EQUIPMENT MANUFACTURERS TO LOCATE PIGTAIL CONNECTIONS FROM GROUND GRID. PROTECT WIRE WITH ABRASION AND WEATHER - RESISTANT SEAL WHERE IT PASSES THROUGH STRUCTURE.
4. 2/0 AWG COPPER WIRE TO MAIN GROUND BAR
5. BOND TO DUCTBANK GROUND WIRE. USE 4/0 AWG BARE WIRE.
6. 12'-0" W x 8'-0" H WALL SPACE RESERVED FOR DATA/ TELECOMMUNICATIONS, OUTSIDE PLANT FIBER OPTIC DEMARCATION EQUIPMENT AND SPECIAL SYSTEMS (FIRE, SECURITY, ENS). PROVIDE AND INSTALL FIRE RATED PLYWOOD BACKBOARD ALONG LENGTH OF WALL SPACE, FROM 6" AFF TO 102" AFF. PAINT WHITE; DO NOT PAINT OVER FIRE RATED STICKER.
7. TELECOMMUNICATIONS GROUND BAR: 1/4" x 4" x 24", COPPER, HARGER NO. GBI14424M. MOUNT TO WALL 24" AFF.

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PART	REV	DESCRIPTION	DRW	CHKR	DE	DVR	DM	DATE
	Ø	ISSUED FOR CONSTRUCTION	KB	BW	JL		LE	06/2017

REVISION OR ISSUE PURPOSE — REVISION APPROVALS (PE, DATE) — SQUAD CHECK (WE, AR, CV, ST, HV, EM, FP, PD, EE, IE, M, NP)

RPE: JAMES KEITH LANDMAN, REGISTERED ENGINEER, AGRICULTURE, No. 119535, STATE OF TENNESSEE

DRAWING APPROVALS		DATE
DRW	K BARTLETT	06/16/17
CHKR	B WILKINSON	06/16/17
DE	J LANDMAN	06/16/17
DVR		
DM	L ELLIS	06/16/17
PE	Teresa J. Pierce, P.E.	

REV. DATE

UCOR URS | CH2M Oak Ridge LLC

OF200 Mercury Treatment Facility

Designed by URS|CH2M Oak Ridge LLC (UCOR) for the Department of Energy Oak Ridge Office of Environmental Management under U. S. Government contract DE-SC-0004645

Y-12 National Security Complex managed and operated by Consolidated Nuclear Security, LLC for the Department of Energy under U.S. Government contract DE-NA0001942 « Oak Ridge, Tennessee »

PROJECT NAME: OF200 MERCURY TREATMENT FACILITY

ELECTRICAL
HEADWORKS
ELECTRICAL ROOM GROUNDING PLAN

USE	DISC	DT	DC	CM	SYSTEM	STAT	SIZE	BLDG	FL	CLASS
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