TRANSFORMER SCHEDULE

PRIMARY VOLTAGE – 480V DELTA				XFMR KVA	SECONDARY VOLTAGE – 120/208V WYE				GROUNDING ELECTRODE CONDUCTOR
FEEDER BREAKER	WIRE SIZE	CONDUIT SIZE	FLA		FLA	CONDUIT SIZE	WIRE SIZE	TERMINAL BREAKER	
70A/3P	3 #4, #8 G.	1–1/4"	54	45	125	2"	4 #1/0, #6 BJ	150A/3P	#6

GENERAL NOTES

1. ALL WORK SHOWN IS EXISTING UNLESS OTHERWISE NOTED.
2. WORK SHOWN DARK IS NEW UNLESS OTHERWISE NOTED.
3. WORK SHOWN WILL BE CONDUCTED IN PHASES. REFER TO DEMOLITION AND NEW WORK PLANS FOR SEQUENCE OF WORK.

PLAN KEYED NOTES

(01) SEE TRANSFORMER SCHEDULE FOR SECONDARY FEEDER SIZE.

(02) ISOLATION PANEL, 277V 1 PHASE PRIMARY, 10KVA, 120V, 1 PHASE SECONDARY. TYPICAL OF TWO (2) NEW ISOLATION PANELS.

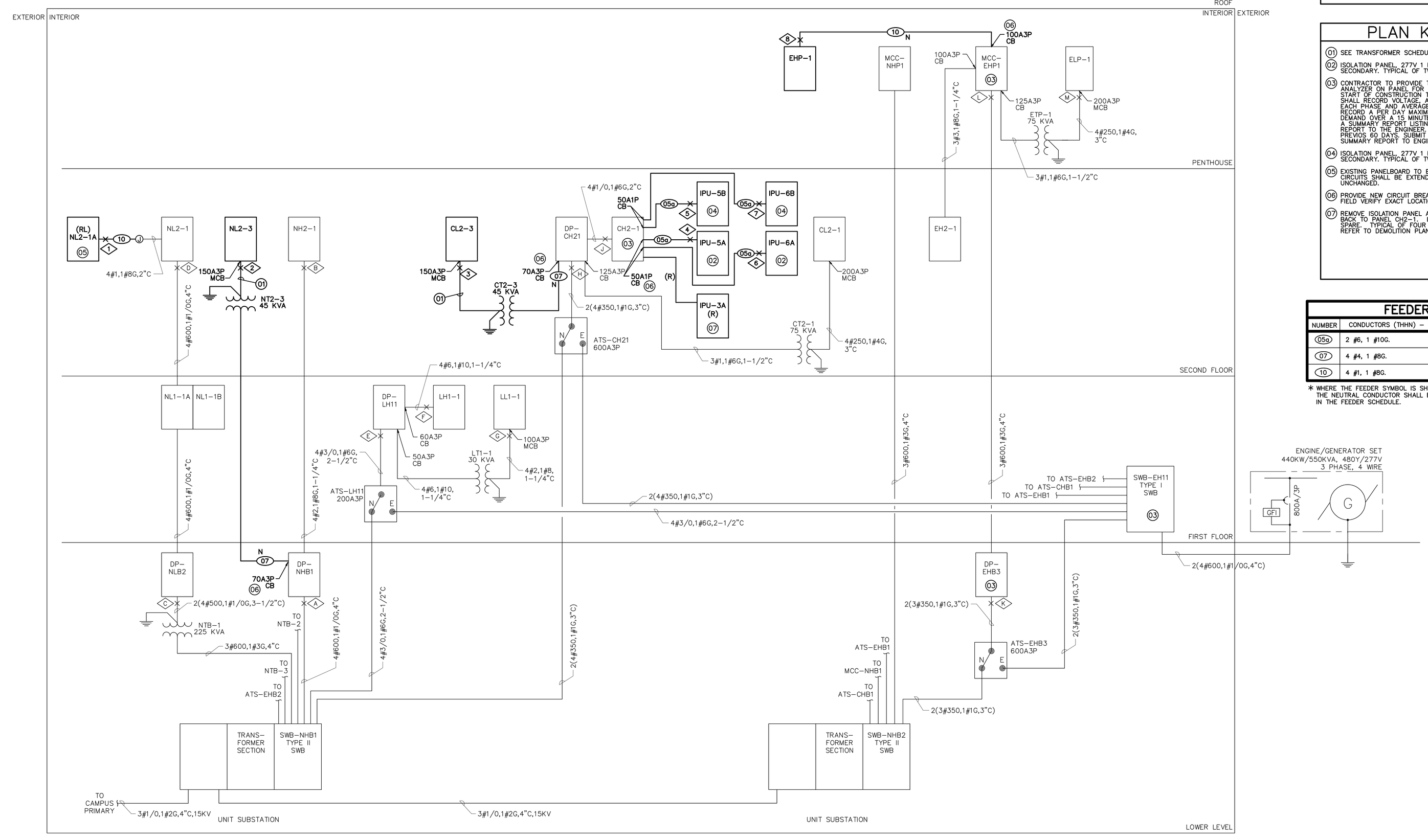
(03) CONTRACTOR TO PROVIDE THREE PHASE DIGITAL RECORDING CIRCUIT ANALYZER ON PANEL FOR A PERIOD OF THIRTY DAYS PRIOR TO THE START OF CONSTRUCTION TO VERIFY EXISTING LOAD. CIRCUIT ANALYZER SHALL RECORD VOLTAGE, AMPERAGE, KVA, AND POWER FACTOR FOR EACH PHASE AND AVERAGE OF ALL PHASES. ANALYZER SHALL ALSO RECORD A PER DAY MAXIMUM DEMAND (MEASURE OF AVERAGE POWER DEMAND OVER A 15 MINUTE PERIOD). THE CONTRACTOR SHALL COMPILE A SUMMARY REPORT LISTING MAXIMUM READINGS AND SUBMIT THE REPORT TO THE ENGINEER. ANALYZER SHALL HAVE BEEN CALIBRATED IN PREVIOS 60 DAYS. SUBMIT DOCUMENTATION OF CALIBRATION ALONG WITH SUMMARY REPORT TO ENGINEER.

(04) ISOLATION PANEL, 277V 1 PHASE PRIMARY, 10KVA, 208/120V, 1 PHASE SECONDARY. TYPICAL OF TWO (2) NEW ISOLATION PANELS.

(05) EXISTING PANELBOARD TO BE RELOCATED, FEEDERS AND ALL EXISTING CIRCUITS SHALL BE EXTENDED TO NEW PANEL LOCATION. NET LOAD UNCHANGED.

(06) PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACE AT EXISTING PANEL. FIELD VERIFY EXACT LOCATION.

(07) REMOVE ISOLATION PANEL AND ASSOCIATED CONDUIT AND CONDUCTOR BACK TO PANEL CH2–1. LABEL CIRCUIT BREAKER AT PANEL CH2–1 AS SPARE. TYPICAL OF FOUR (4) ISOLATION PANELS AT OR'S 3 AND 4. REFER TO DEMOLITION PLAN.



FEEDER SCHEDULE

NUMBER	CONDUCTORS (THHN) – COPPER	CONDUIT	CONDUIT W/O NEUTRAL
(05a)	2 #6, 1 #10G.	1–1/4"	1"
(07)	4 #4, 1 #8G.	1–1/4"	1–1/4"
(10)	4 #1, 1 #8G.	2"	1–1/2"

* WHERE THE FEEDER SYMBOL IS SHOWN WITH A SUBSCRIPT "N" (SUCH AS (02)N), THE NEUTRAL CONDUCTOR SHALL BE DELETED FROM THE CONDUCTORS SHOWN IN THE FEEDER SCHEDULE.

(E)SHORT CIRCUIT CURRENT SCHEDULE

KEY	AMPERES	
	AVAILABLE	AIC–RATING
A	22,134	––
B	9,999	––
C	19,629	––
D	9,088	––
E	8,538	––
F	7,762	––
G	3,348	––
H	17,485	––
J	16,643	––
K	24,300	––
L	16,913	––
M	8,030	––

BASED ON RECORD DOCUMENTS, DATED 11/02/87.

SHORT CIRCUIT CURRENT SCHEDULE

KEY	AMPERES	
	AVAILABLE	AIC–RATING
1	5,053	––
2	2,991	––
3	3,388	––
4	2,626	––
5	2,626	––
6	2,626	––
7	2,626	––
8	13,708	––

CALCULATED FROM RECORD DOCUMENT VALUES, DATED 11/02/87.

FULLY SPRINKLERED

Revisions:	Date

CONSULTANTS:

CIVIL/STRUCTURAL:
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CONSULTING ENGINEERS
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SSR JOB #: 06270120

PLAN NORTH

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

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Heery Project Number:
0830400

Drawing Title: ELECTRICAL ONE LINE DIAGRAM

Approved: Project Director

Project Title: SURGERY RENOVATION AND EXPANSION

Location: CHEYENNE, WY

Date: 04/24/09 | Checked: JLS | Drawn: JLS

Project Number: VA-259-09-RA-209

Building Number: BLDG. NO. 1

Drawing Number: ES601

Dwg. 41 of 44

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231