

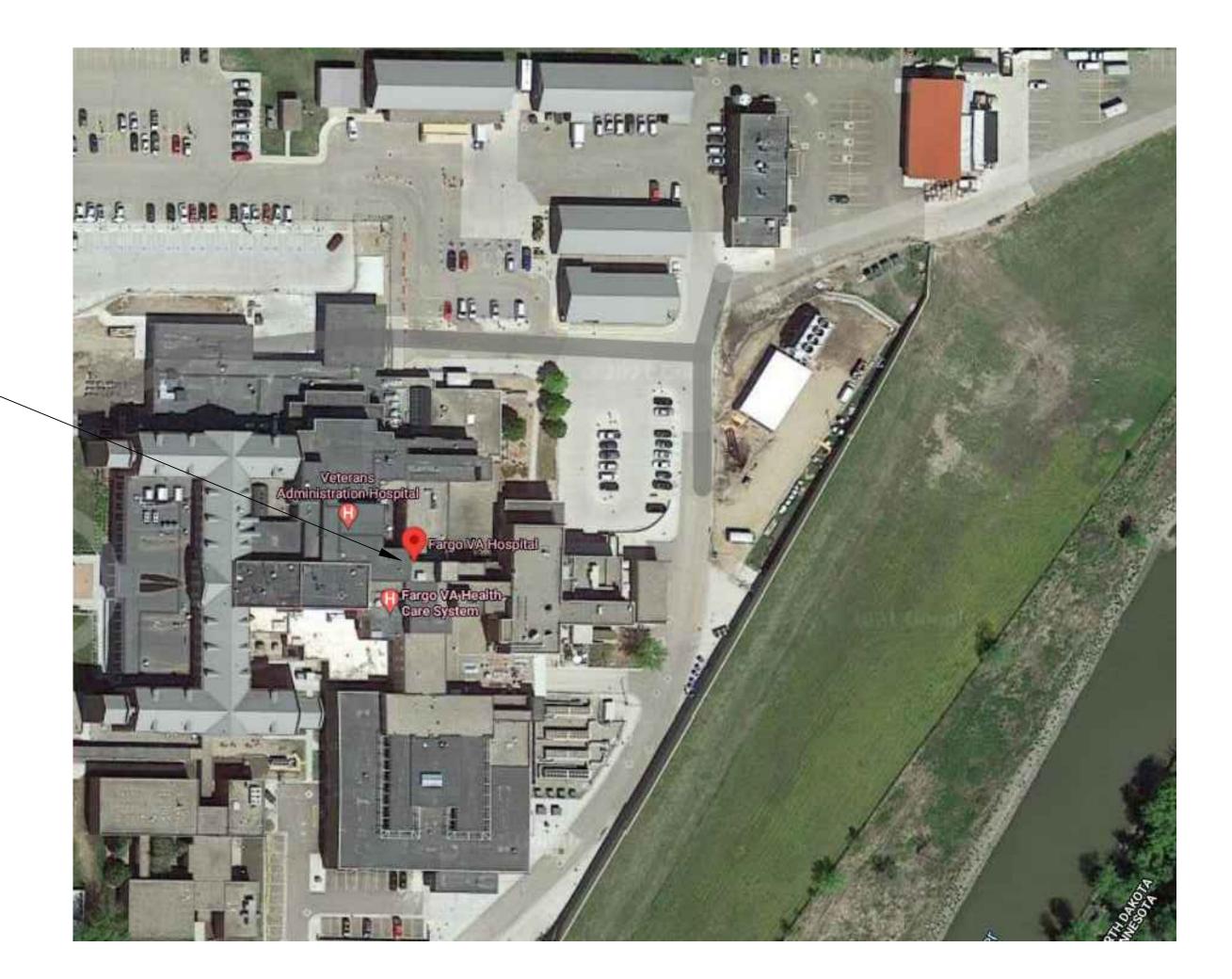
VA #437-21-160 **Upgrade Medical Gas System Fargo VA Health Care System** 2101 N. Elm Street Fargo, ND 58102

# **Construction Document Plans**

**CD-1 Design Package** Volume 2 of 4 July 07, 2021

# UPGRADE MEDICAL GAS SYSTEM FARGO VA HEALTH CARE SYSTEM 2101 ELM STREET N FARGO, NORTH DAKOTA 58102 VA PROJECT NUMBER: 437-21-160

PROJECT LOCATION-



|              | SHEET LIST TABLE  |
|--------------|---|
| SHEET NUMBER | SHEET TITLE   |
| G-0.00       | COVER SHEET   |
| A-0.01       | PROJECT DETAILS   |
| A-1.11       | FIRST FLOOR LIFE SAFETY PLAN                            |
| A-1.21       | SECOND FLOOR LIFE SAFETY PLAN                           |
| A-1.31       | THIRD FLOOR LIFE SAFETY PLAN                            |
| A-1.41       | FOURTH FLOOR LIFE SAFETY PLAN                           |
| A-2.01       | BASEMENT - PHASING PLAN                                 |
| A-2.11       | FIRST FLOOR - PHASING PLAN                              |
| A-2.21       | SECOND FLOOR - PHASING PLAN                             |
| A-2.31       | THIRD FLOOR - PHASING PLAN                              |
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| P-0.01       | GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND SCHEDULES     |
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| P-1.11       | FIRST FLOOR - DEMOLITION PLAN                           |
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| E-0.00       | ELECTRICAL LEGEND AND ABBREVIATIONS                     |
| E-1.01       | BASEMENT ELECTRICAL PLANS                               |
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| E -1.21      | SECOND FLOOR ELECTRICAL DEMOLITION PLAN<br>AREA 1       |
| E-1.22       | SECOND FLOOR ELECTRICAL DEMOLITION PLAN<br>AREA 2       |
| E -1.23      | SECOND FLOOR NEW ELECTRICAL PLAN<br>AREA 1              |
| E-1.24       | SECOND FLOOR NEW ELECTRICAL PLAN<br>AREA 2              |
| E-1.31       | THIRD FLOOR ELECTRICAL DEMOLITION PLAN                  |
| E-1.32       | THIRD FLOOR NEW ELECTRICAL PLAN                         |
| E-1.41       | FOURTH FLOOR ELECTRICAL DEMOLITION PLAN                 |
| E-1.412      | FOURTH FLOOR NEW ELECTRICAL PLAN                        |

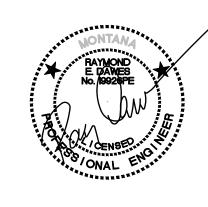
## 100% CONSTRUCTION DOCUMENTS

Office of

Construction

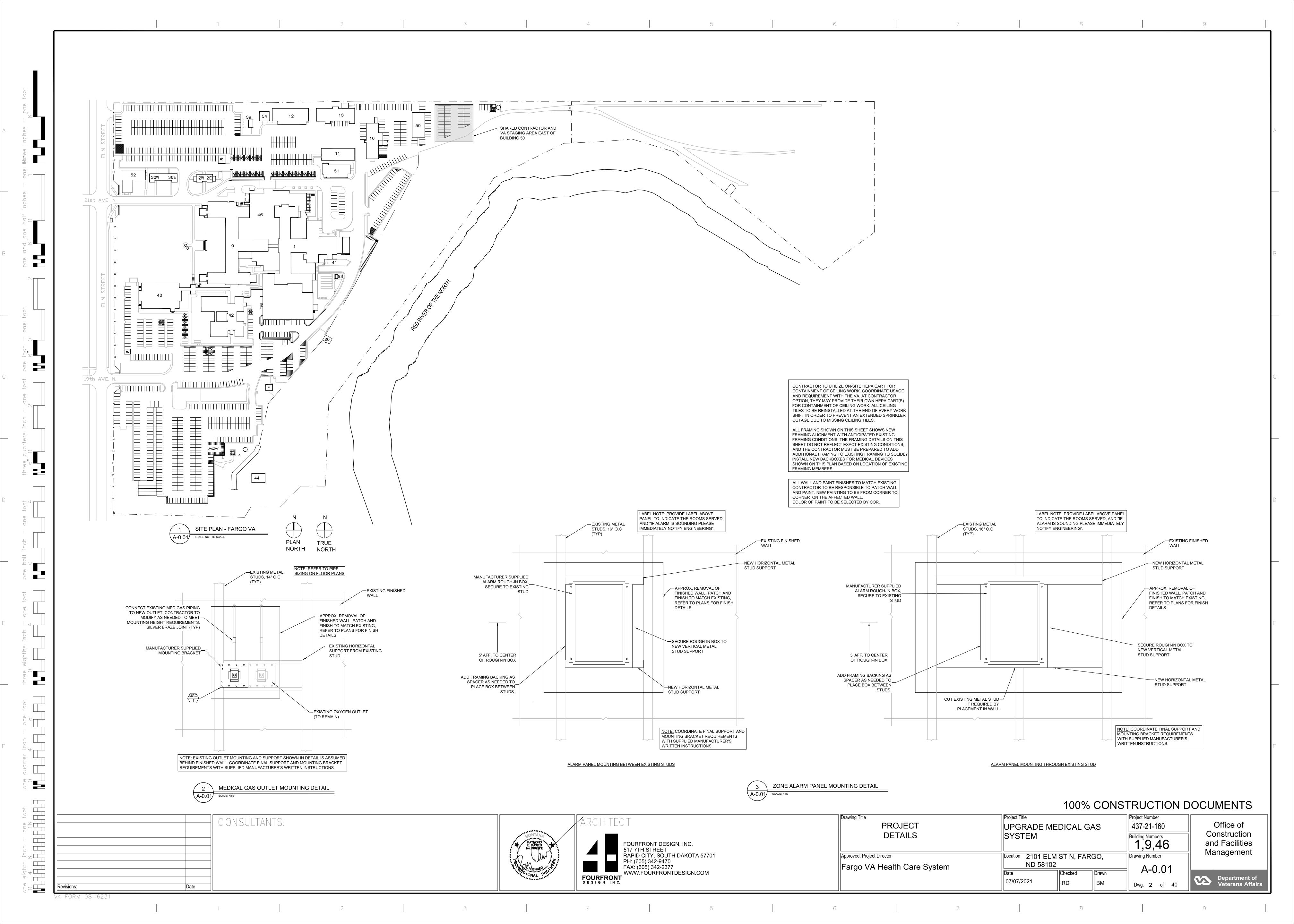
and Facilities

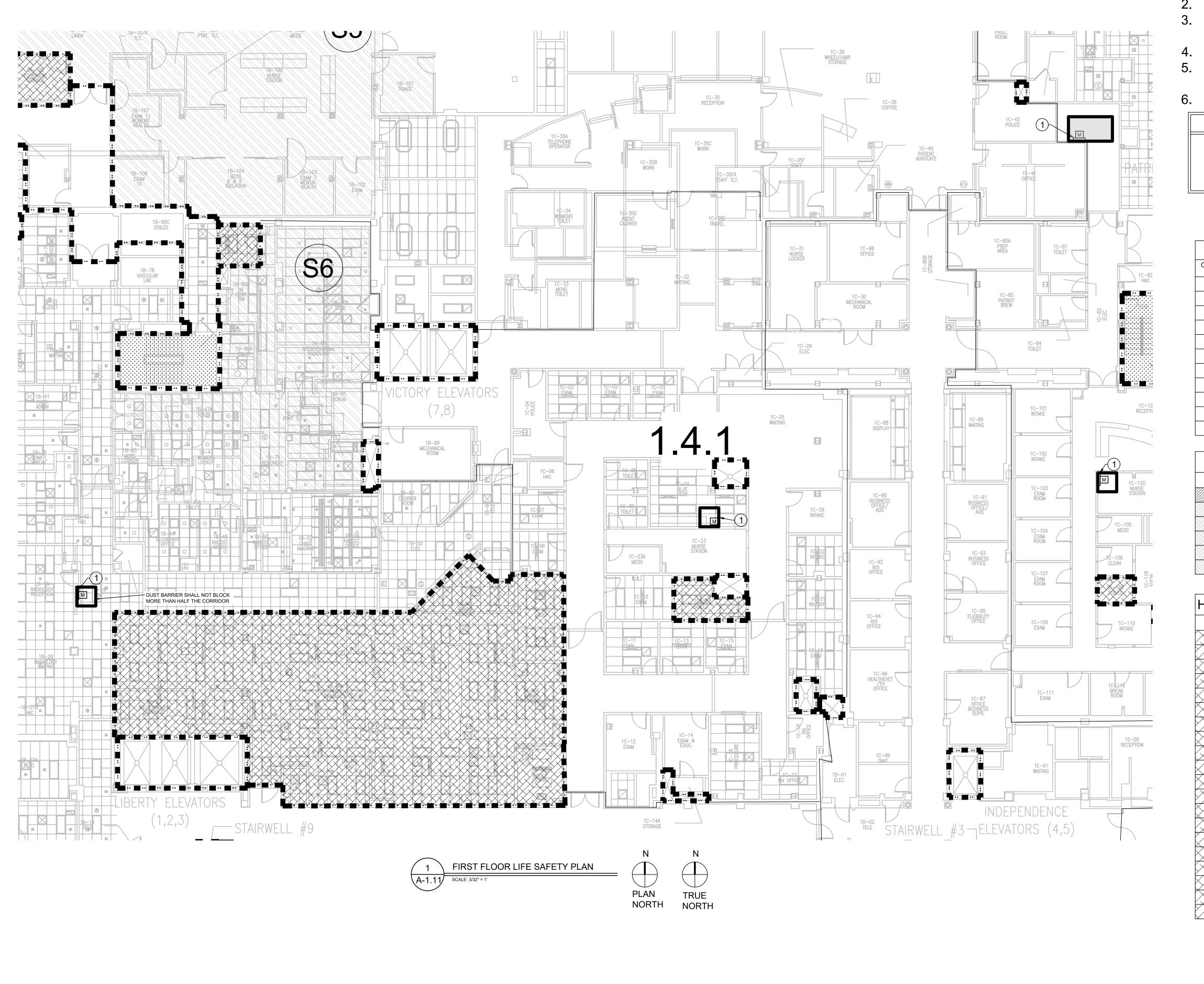
Management





RD





#### **GENERAL NOTES:**

- 1. THERE ARE OTHER UTILITIES, EQUIPMENT, ETC IN THIS SPACE THAT ARE NOT SHOWN FOR CLARITY. CONTRACTOR TO ACCOUNT FOR THESE ITEMS.
- 2. ALL MED GAS PIPING IS LOCATED IN CEILINGS AND WALLS. PATCH WALLS AFTER WORK IS COMPLETE.
- 3. PAINT TO MATCH EXISTING, COORDINATE WITH OWNER. IF COLOR CANNOT BE MATCHED, CONTRACTOR TO PAINT CORNER TO CORNER AND MAKE ACCENT WALL.
- 4. CONTRACTOR TO SCHEDULE WORK WITH THE VA COR.
- 5. MEDICAL GAS CERTIFICATIONS TO BE PERFORMED IN EACH AREA OR SYSTEM IMMEDIATELY AFTER IT IS COMPLETED.
- 6. ALL OLD TO NEW SWITCH OVER NEEDS TO HAPPEN IN ONE NIGHT SHUTDOWN AND CERTIFIED AT THE SAME TIME.

#### KEYED ARCHITECTURAL NOTES

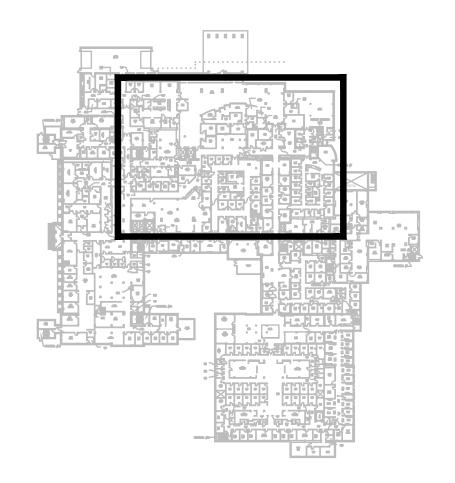
1 INSTALL DUST BARRIERS AROUND WORK AREA. PATCH AFFECTED AREA WITH 5/8" FIRE RATED GYP WALL AFTER WORK IS COMPLETE. FINISH TO MATCH EXISTING.

| 1ST FLC           | 1ST FLOOR- EXISTING HEALTHCARE OCCUPANCY |                     |            |                |               |  |  |  |  |
|-------------------|--|---------------------|------------|----------------|---------------|--|--|--|--|
| COMPARTMENT<br>ID | COMPARTMENT<br>SQ.FT.                    | SPRINKLER<br>SYSTEM | AREA USE   | DISTANCE SMOKE | DISTANCE EXIT |  |  |  |  |
| 1.1               | 8,728                                    | FULL                | HEALTHCARE | 170'           | 92'           |  |  |  |  |
| 1.2               | 11,124                                   | FULL                | HEALTHCARE | 170'           | 166'          |  |  |  |  |
| 1.3               | 20,636                                   | FULL                | HEALTHCARE | 219'           | 166'          |  |  |  |  |
| 1.4               | 19,502                                   | FULL                | HEALTHCARE | 120'           | 264'          |  |  |  |  |
| 1.4.1             | 8,233                                    | FULL                | HEALTHCARE | 97'            | 264"          |  |  |  |  |
| 1.5               | 7,987                                    | FULL                | HEALTHCARE | 99'            | 116'          |  |  |  |  |
| 1.6               | 9,045                                    | FULL                | HEALTHCARE | 129'           | 127'          |  |  |  |  |
| 1.7               | 14,927                                   | FULL                | HEALTHCARE | 151'           | 123'          |  |  |  |  |
| 1.8               | 5,204                                    | FULL                | HEALTHCARE | 135'           | 137'          |  |  |  |  |
| 1.9               | 21,076                                   | FULL                | HEALTHCARE | 176'           | 202'          |  |  |  |  |
|                   |  |                     |            | •              |               |  |  |  |  |

| 1ST         | 1ST FLOOR- SUITE INFORMATION |                              |                          |                                 |  |  |  |  |  |  |
|-------------|------------------------------|------------------------------|--------------------------|---------------------------------|--|--|--|--|--|--|
| SUITE ID    | SUITE ID<br>SQ. FT.          | SUITE<br>TYPE                | REMOTE EXIT REQUIREMENTS | DISTANCE TO EXIT<br>ACCESS DOOR |  |  |  |  |  |  |
| (\$)        | 5,028                        | NON-PATIENT/<br>NON-SLEEPING | 2                        | 92'                             |  |  |  |  |  |  |
| <b>S2</b>   | 7,816                        | NON-SLEEPING                 | 2                        | 95'                             |  |  |  |  |  |  |
| <b>(S3)</b> | 4,684                        | NON-SLEEPING                 | 2                        | 78'                             |  |  |  |  |  |  |
| (S4)        | 2,389                        | NON-SLEEPING                 | 1                        | 65'                             |  |  |  |  |  |  |
| <b>S</b> 5  | 5,545                        | NON-SLEEPING                 | 2                        | 87'                             |  |  |  |  |  |  |
| (S6)        | 1,852                        | NON-SLEEPING                 | 2                        | 59'                             |  |  |  |  |  |  |

| ROOM ID | ROOM ID<br>SQ. FT. |
|---------|--------------------|
| 1B-80C  | 69                 |
| 1B-90   | 3,612              |
| 1B-109  | 135                |
| 18-110  | 63                 |
| 1B-120  | 2,418              |
| 1B-122  | 103                |
| 1C-20   | 98                 |
| 10-108  | 40                 |
| 10-03   | 277                |
| 10-23   | 104                |
| 1D-57   | 52                 |
| 4D-73   | 48                 |
| 112-86  | 36                 |
| 10-103  | 42                 |
| 1D-140  | 83                 |
| 10/141  | 217                |
| 10-143  | 121                |
| 1E-20   | 742                |
| 1E-34   | 149                |
| 15-34A  | 51                 |

|                | LINE LEGEND                                |
|----------------|--|
|                | DUST BARRIER                               |
| <u> </u>       | 1-HR FIRE RATED WALL                       |
|                | 2-HR FIRE RATED WALL                       |
| -000000000000- | SMOKE BARRIER                              |
|                | HAZARDOUS AREA - SMOKE<br>RESISTIVE CONST. |
|                | NON-PATIENT/NON-SLEEPING SUITE             |
|                | NON-SLEEPING SUITE                         |
|                | SLEEPING SUITE                             |
|                | AREA UNDER CONSTRUCTION                    |
| + + + +        | EXIT STAIRWELL                             |
| •              | EXTERIOR EXIT                              |
| S#             | SUITE ID                                   |
| #.#            | COMPARTMENT ID                             |



# 100% CONSTRUCTION DOCUMENTS

Dwg. **3** of 40

Project Number



4 8 16





FIRST FLOOR LIFE
SAFETY PLAN

Approved: Project Director
Fargo VA Health Care System

UPGRADE MEDICAL GAS
SYSTEM

Building Numbers
1,9,46

Location 2101 ELM ST N, FARGO,
ND 58102
Date Checked Drawn

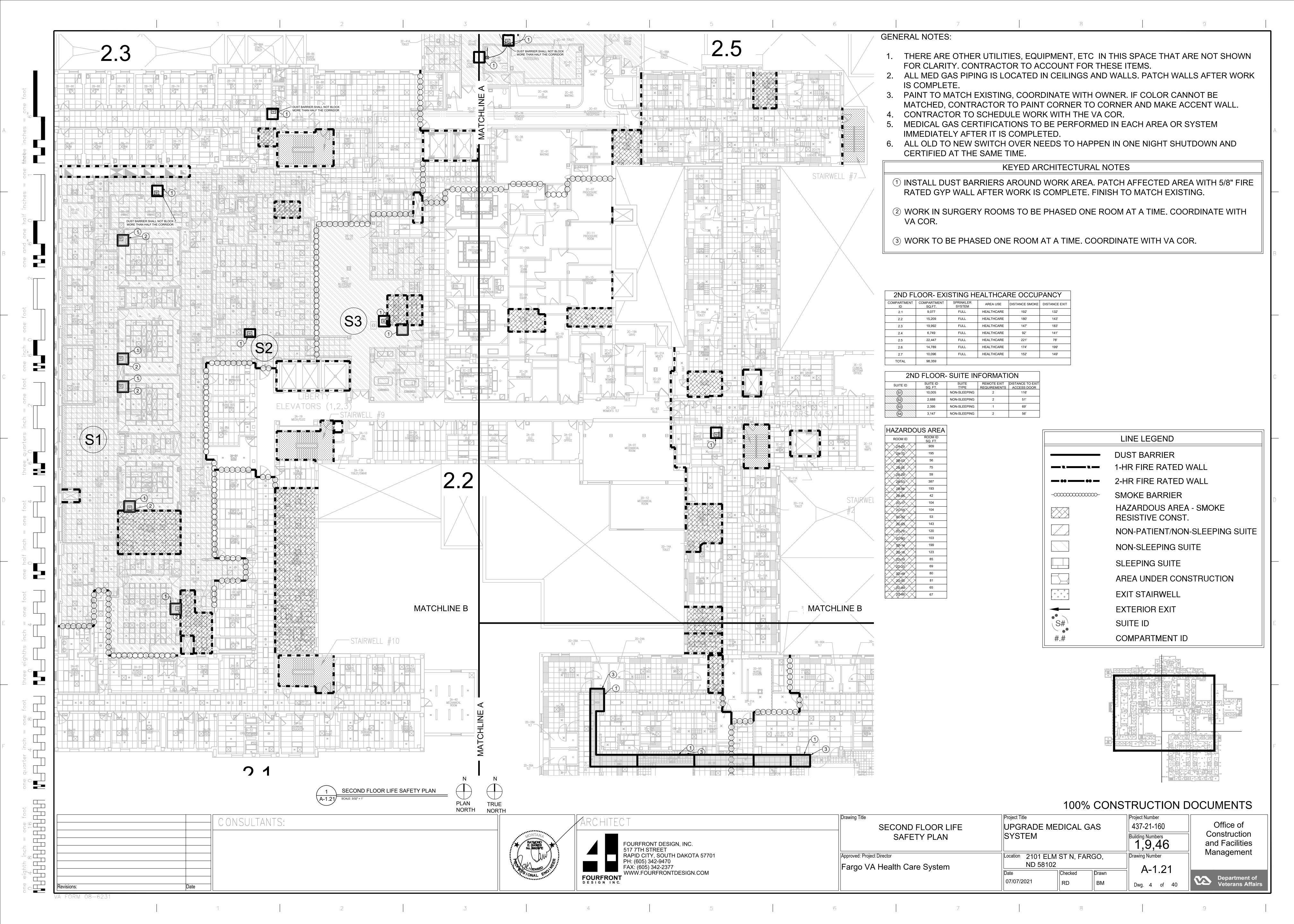
437-21-160
Building Numbers
1,9,46

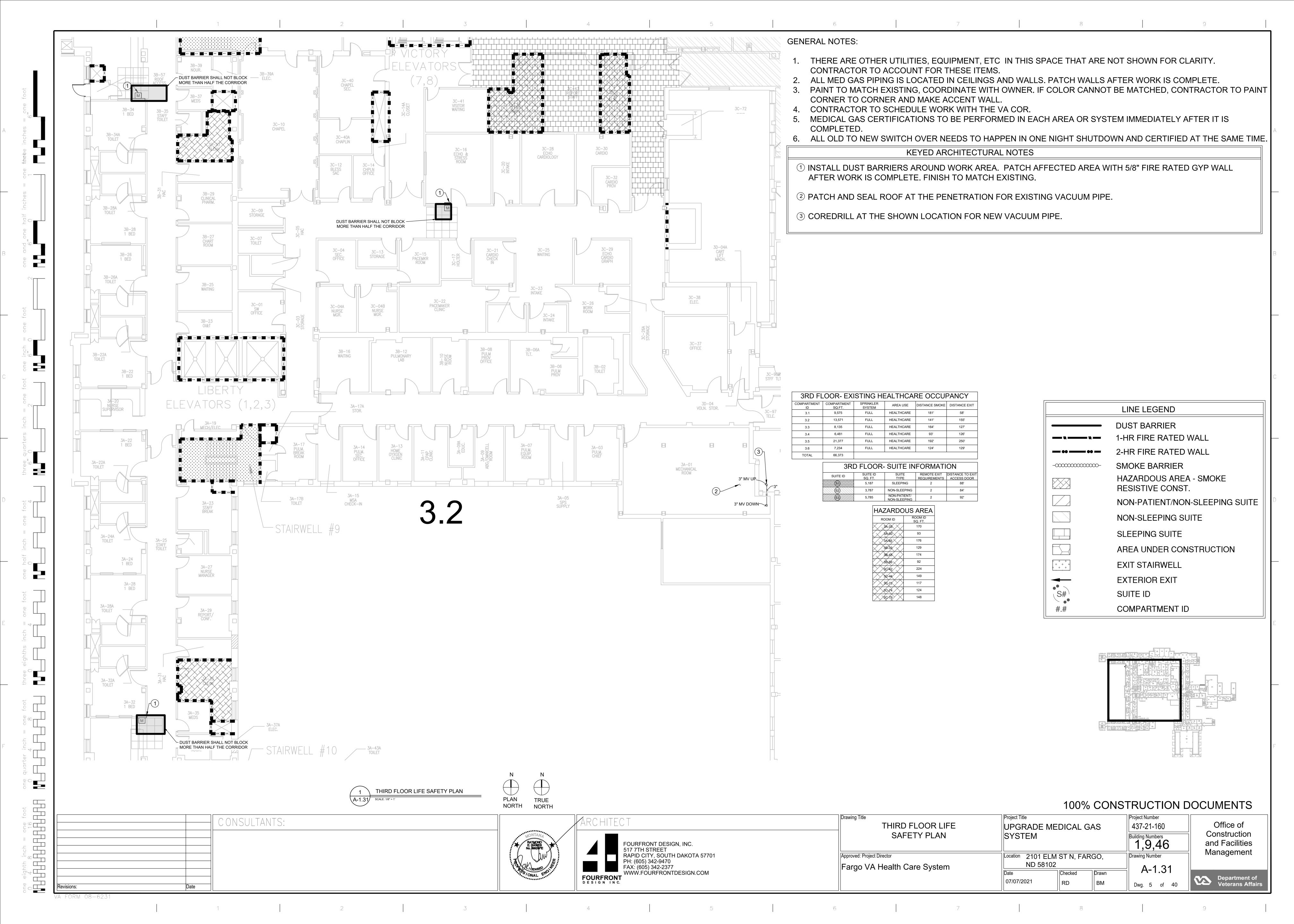
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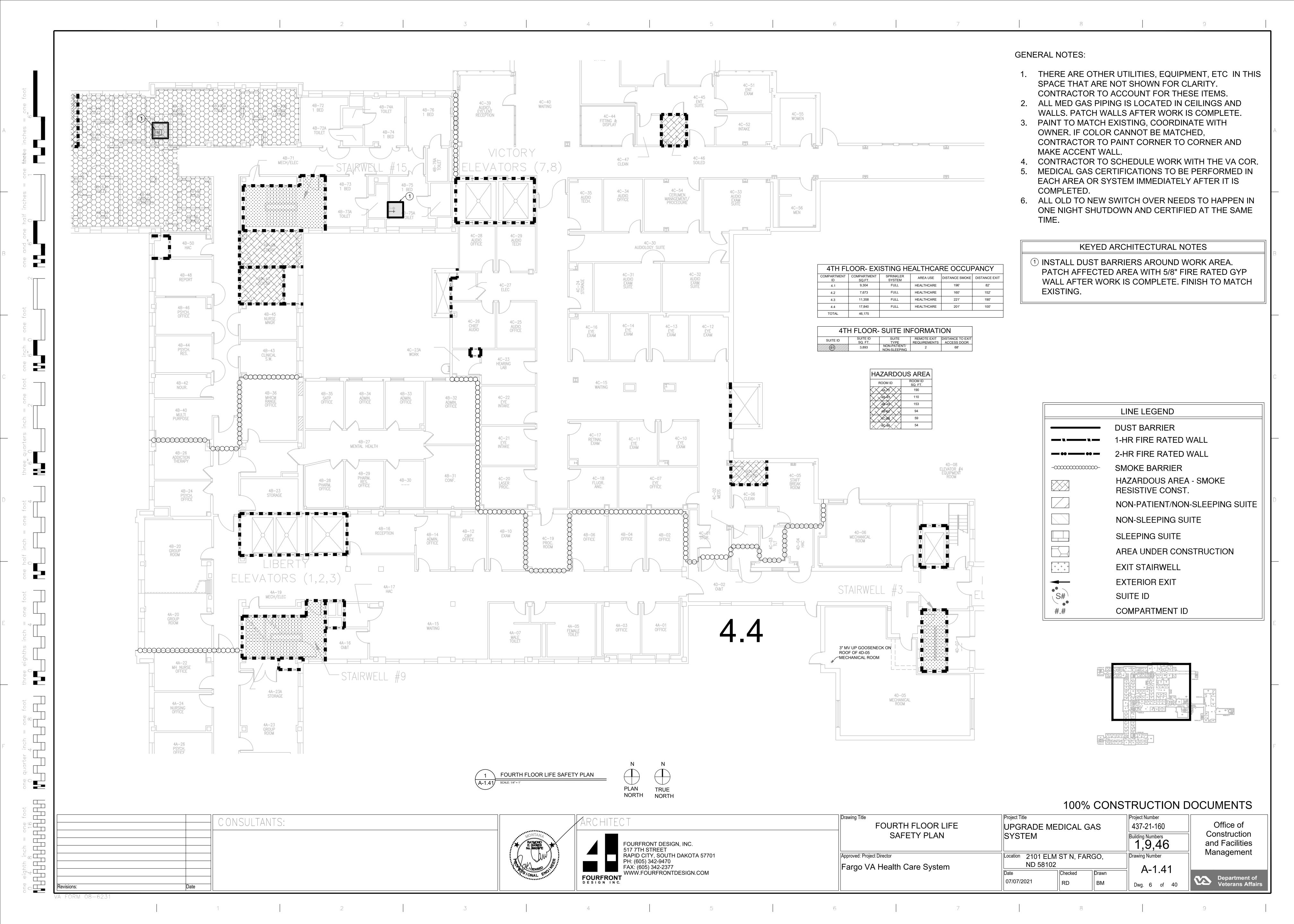
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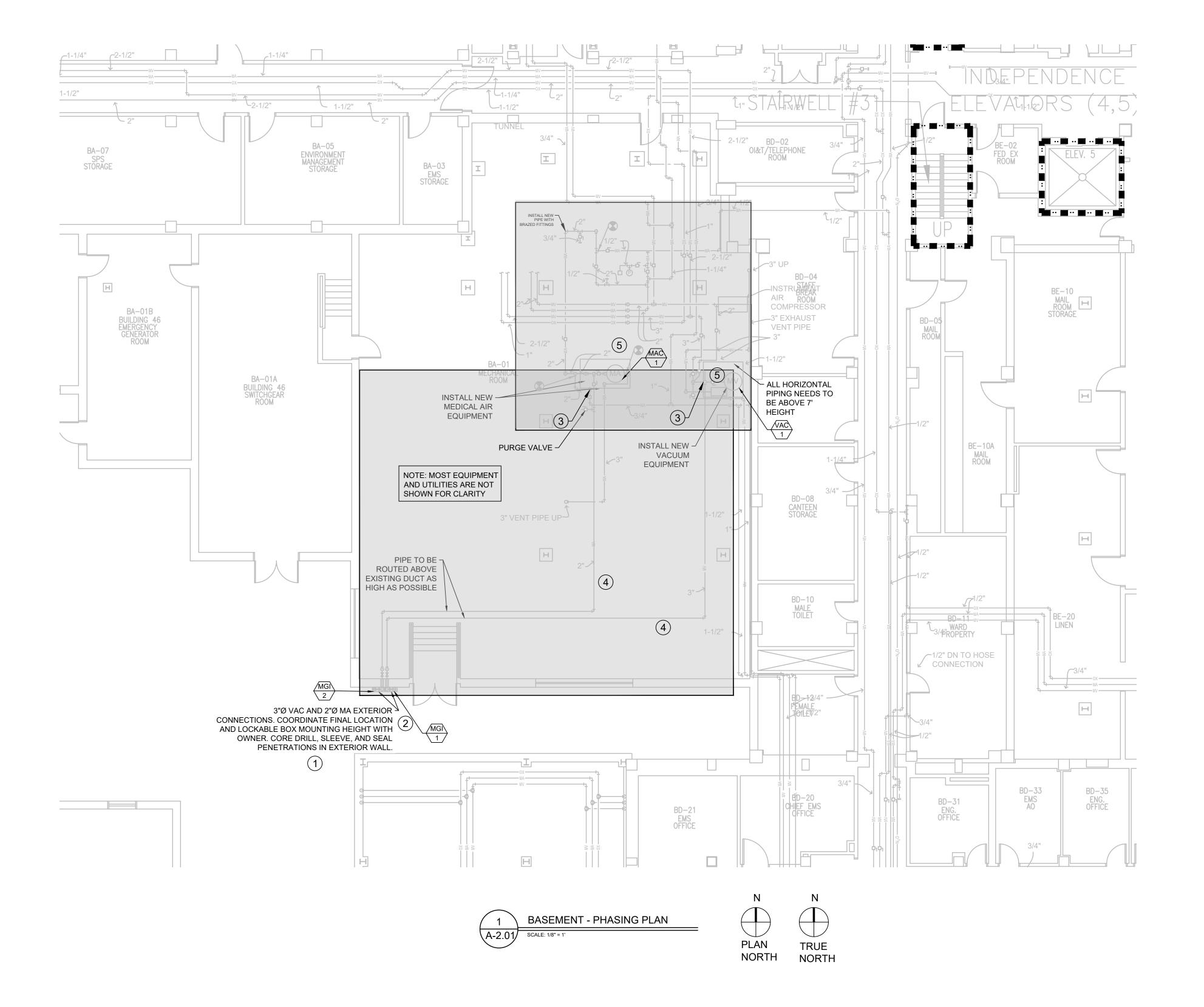
07/07/2021

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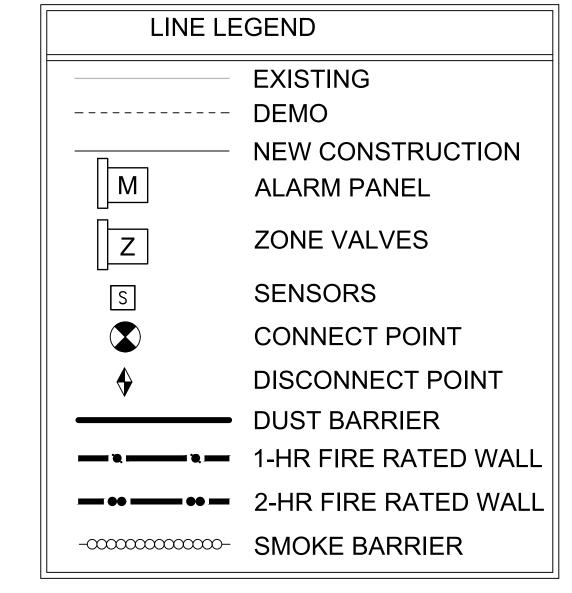


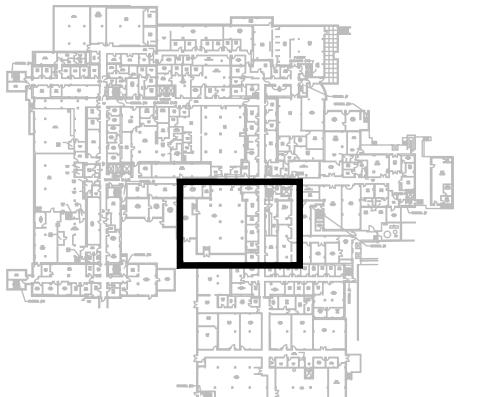
#### **GENERAL NOTES:**

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- 2. ALL MED GAS PIPING IS LOCATED IN CEILINGS AND WALLS. PATCH WALLS AFTER WORK IS COMPLETE.
- 3. PAINT TO MATCH EXISTING, COORDINATE WITH OWNER. IF COLOR CANNOT BE MATCHED, CONTRACTOR TO PAINT CORNER TO CORNER AND MAKE ACCENT WALL
- 4. CONTRACTOR TO SCHEDULE WORK WITH THE VA COR.
- 5. MEDICAL GAS CERTIFICATIONS TO BE PERFORMED IN EACH AREA OR SYSTEM IMMEDIATELY AFTER IT IS COMPLETED.
- 6. ALL OLD TO NEW SWITCH OVER NEEDS TO HAPPEN IN ONE NIGHT SHUTDOWN AND CERTIFIED AT THE SAME TIME.
- 7. CONTRACTOR SHALL BE RESPONSIBLE TO RELOCATE OR PUT IN NEW SPRINKLER LINES AND HEADS AFFECTED BY OR DUE TO THE DEMOLITION WORK OR NEW EQUIPMENT INSTALLATION.

## **KEYED PHASING PLAN NOTES**

- ① CONTRACTOR SHALL VERIFY THE EQUIPMENT THEY INTEND TO SUPPLY FITS WITHIN THE SPACE INDICATED ON THE CONTRACT DOCUMENTS. ANY MODIFICATIONS OR RELOCATIONS OF EQUIPMENT OR UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY WITH NO EXTRA COST TO THE VA. CONTRACTOR TO OBTAIN VA'S APPROVAL PRIOR TO ANY EQUIPMENT OR UTILITY RELOCATION.
- (2) INSTALL NEW ELECTRICAL CONNECTIONS AND PIPING FROM MA AND VAC MAIN TO THE EXTERIOR TEMP./ EMERGENCY CONNECTION POINT FOR MA AND VAC. PIPING TO BE ROUTED ABOVE EXISTING DUCTS AND UTILITIES AS HIGH AS POSSIBLE. INSTALL LOCK BOXES, AND CROSSOVER VALVES TO THE EQUIPMENT LOCATION. CONTRACTOR TO CERTIFY NEW PIPE SECTIONS. CONTRACTOR TO PROVIDE, TEST, AND CERTIFY TEMPORARY MA AND VAC EQUIPMENT SKIDS.
- ③ BYPASS PIPING AND VALVES TO BE INSTALLED SO WHEN EXISTING EQUIPMENT IS REMOVED AND REPLACED WITH NEW EQUIPMENT, LOSS OF SERVICE IS MINIMIZED, TEMPORARY MA AND MV SKIDS SHALL OPERATE, AND SWITCH IS PERFORMED WITHIN SHORT TIME.
- 4 SHUTDOWN EXISTING MA AND VAC EQUIPMENT. TIE NEW CONNECTIONS INTO EXISTING MA AND VAC MAINS BYPASS WITH TEMPORARY VAC AND MA EQUIPMENT NOW SERVING THE BUILDING.
- ⑤ RUN AND CERTIFY NEW MA AND MV EQUIPMENT AND LINES PRIOR TO SWITCH OVER TO FULL OPERATIONAL TESTS. ONCE COMPLETED AND APPROVED, SWITCH OVER SHALL BE SCHEDULED AND WHEN COMPLETE AND APPROVED, THE TEMPORARY EXTERIOR AND MA AND MV SKIDS MAY BE DISCONNECTED AND REMOVED FROM SITE.



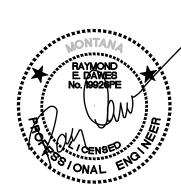


## 100% CONSTRUCTION DOCUMENTS

Dwg. **7** of 40

Project Number







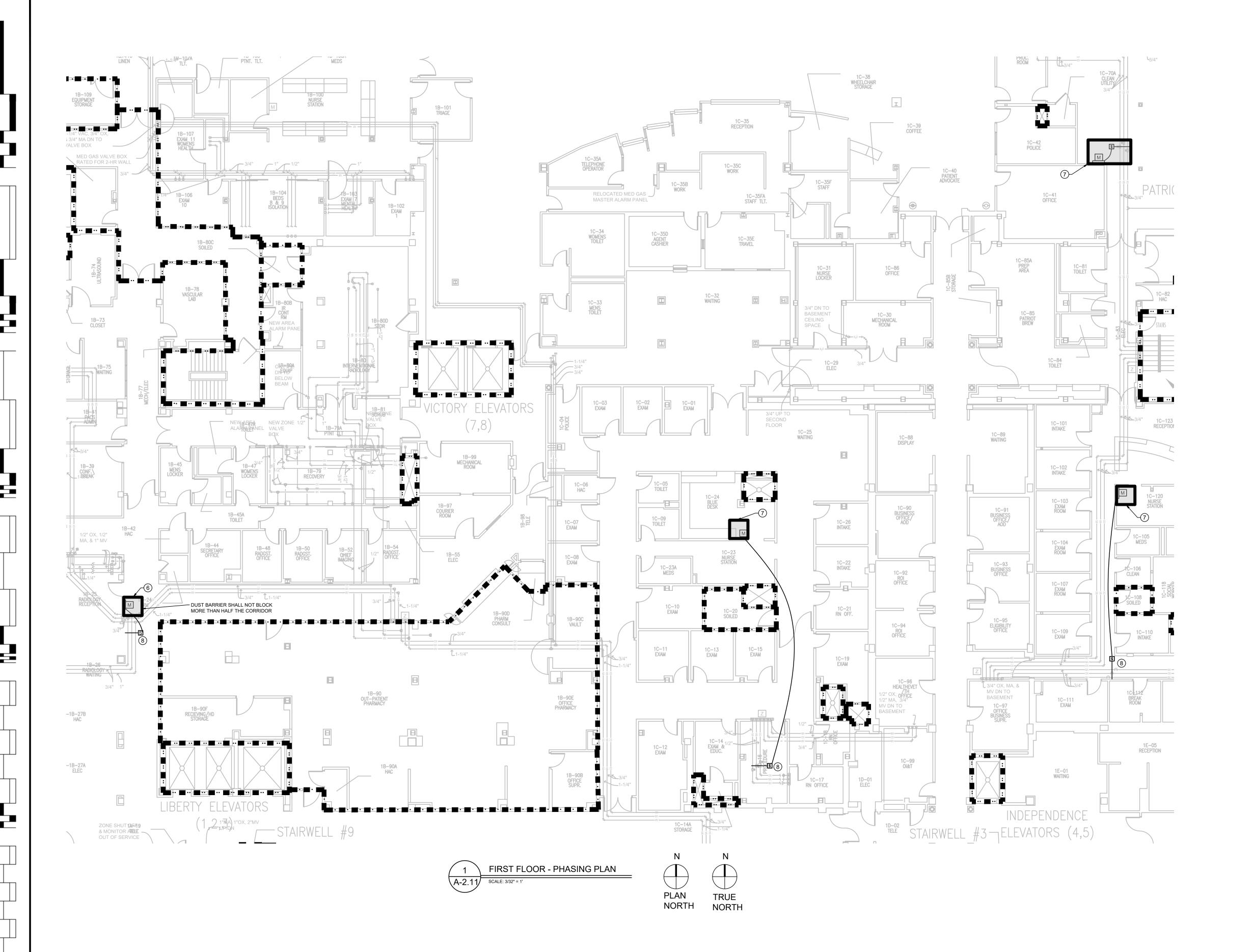
BASEMENT -Approved: Project Director

437-21-160 UPGRADE MEDICAL GAS PHASING PLAN SYSTEM Building Numbers 1,9,46 Location 2101 ELM ST N, FARGO, ND 58102 Fargo VA Health Care System A-2.01 Checked

07/07/2021

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Office of Construction and Facilities Management

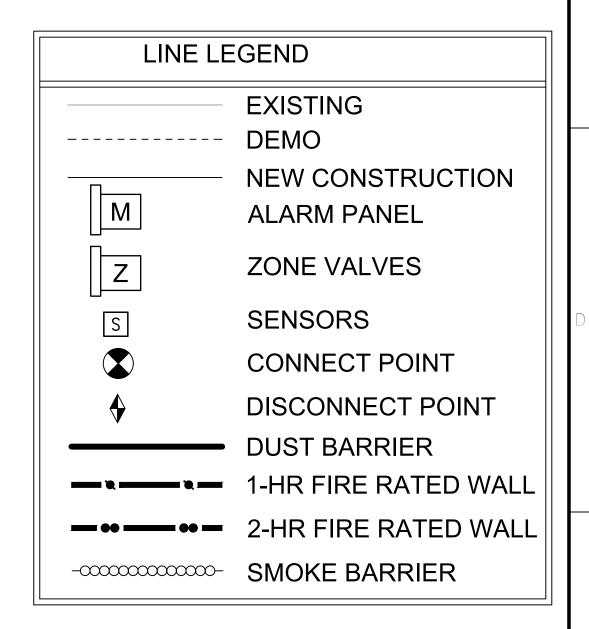


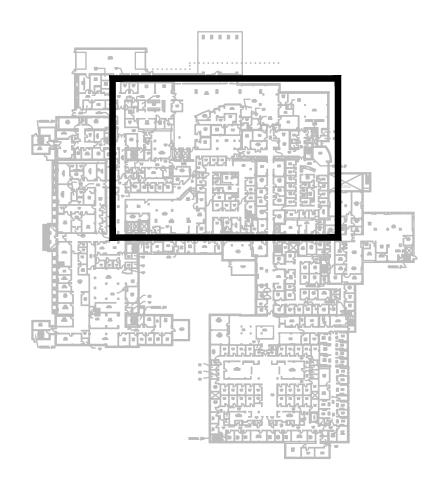
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- 3. PAINT TO MATCH EXISTING, COORDINATE WITH OWNER. IF COLOR CANNOT BE MATCHED, CONTRACTOR TO PAINT CORNER TO CORNER AND MAKE ACCENT WALL.
- 4. CONTRACTOR TO SCHEDULE WORK WITH THE VA COR.
- 5. MEDICAL GAS CERTIFICATIONS TO BE PERFORMED IN EACH AREA OR SYSTEM IMMEDIATELY AFTER IT IS COMPLETED.
- 6. ALL OLD TO NEW SWITCH OVER NEEDS TO HAPPEN IN ONE NIGHT SHUTDOWN AND CERTIFIED AT THE SAME TIME.

#### KEYED PHASING PLAN NOTES

- (6) INSTALL DUST BARRIERS AROUND WORK AREA. SHUTDOWN ZONE WITH EXISTING ZONE VALVES. REMOVE EXISTING ZONE ALARM PANEL AND INSTALL NEW ZONE ALARM PANEL IN THE SAME LOCATION. INSTALL NEW PRESSURE SENSORS IN EXISTING PIPING AND CONNECT TO NEW ZONE ALARM PANEL.
- INSTALL DUST BARRIERS AROUND WORK AREA. SHUTDOWN ZONE WITH EXISTING ZONE VALVES. REMOVE EXISTING ZONE ALARM PANEL AND INSTALL NEW ZONE ALARM PANEL IN THE SAME LOCATION. REMOVE ALL THE PIPING FROM THE EXISTING ZONE ALARM PANEL TO THE MEDICAL GAS SUPPLY LINES. INSTALL NEW PRESSURE SENSORS IN EXISTING PIPING AND CONNECT TO NEW ZONE ALARM PANEL.
- ® EXTEND DUST BARRIER TO THIS WORK SPACE, OR ALTERNATIVELY USE HEPA CART FOR CEILING WORK.

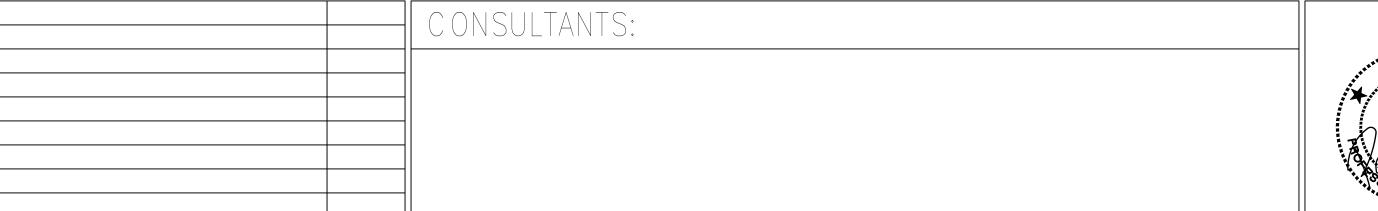


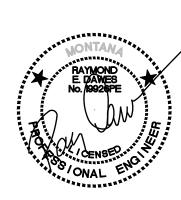


# 100% CONSTRUCTION DOCUMENTS

Dwg. **8** of **40** 

Project Number







FIRST FLOOR PHASING PLAN

Approved: Project Director
Fargo VA Health Care System

UPGRADE MEDICAL GAS
SYSTEM

Location 2101 ELM ST N, FARGO,
ND 58102
Date Checked Drawn

437-21-160
Building Numbers
1,9,46

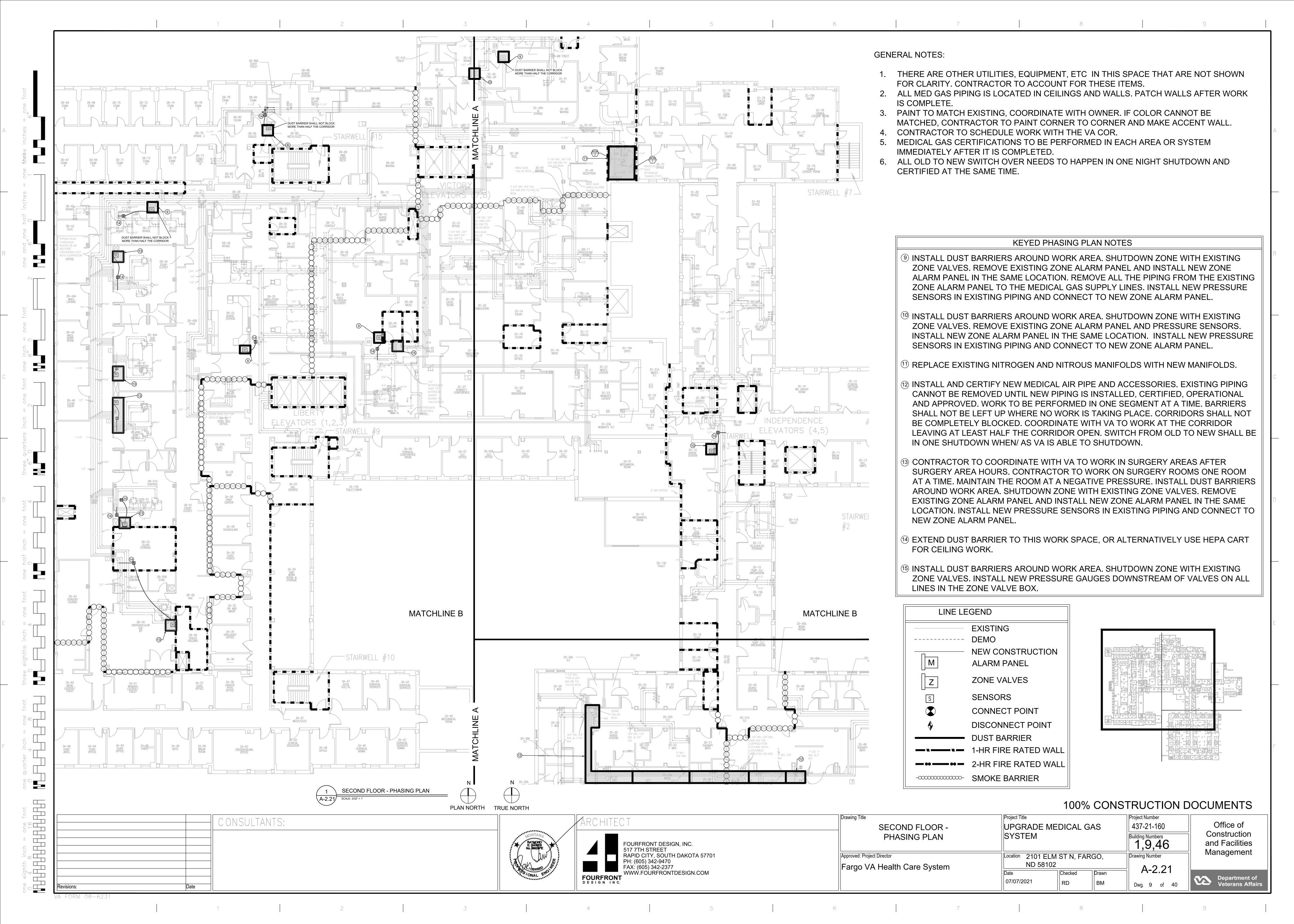
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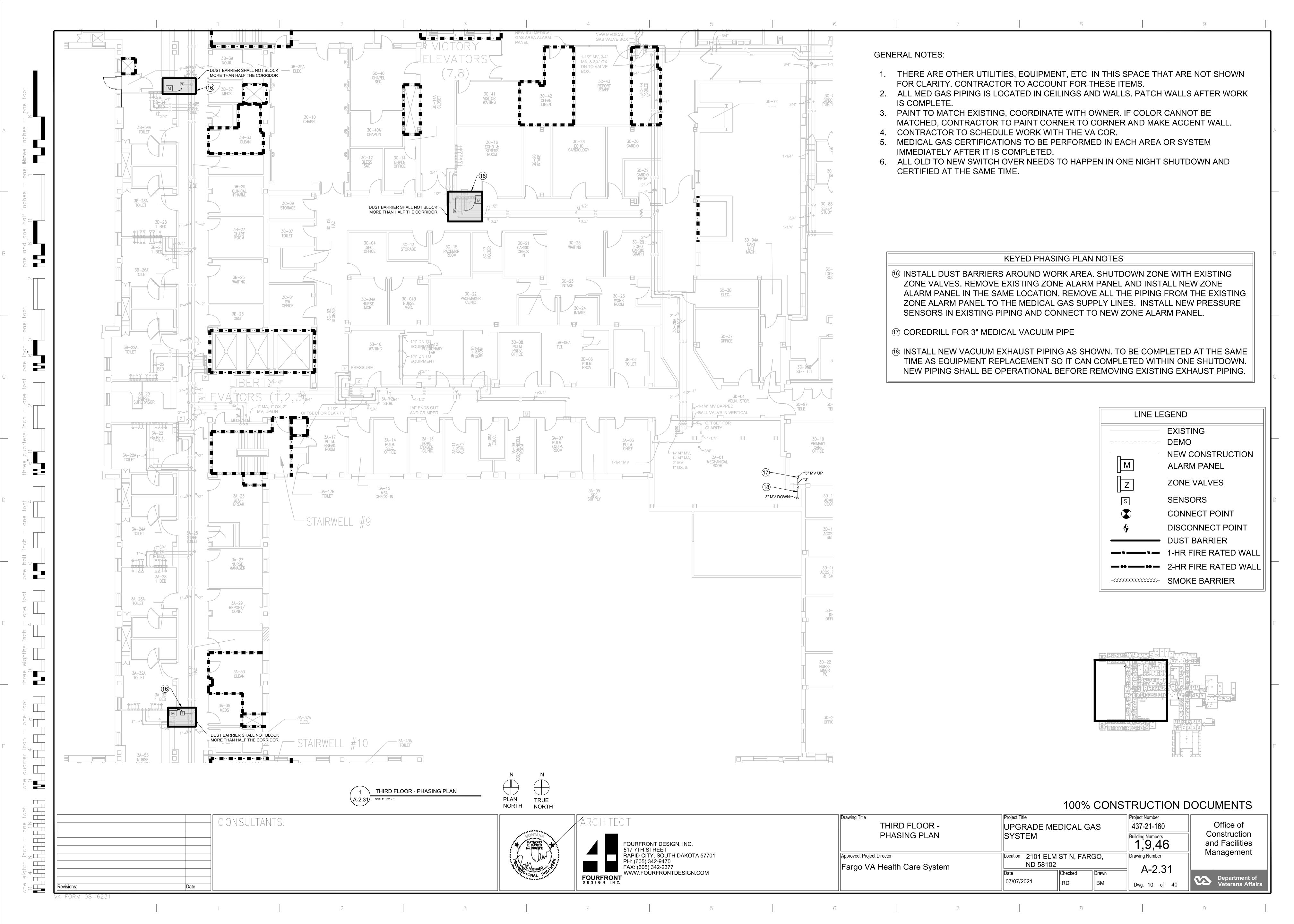
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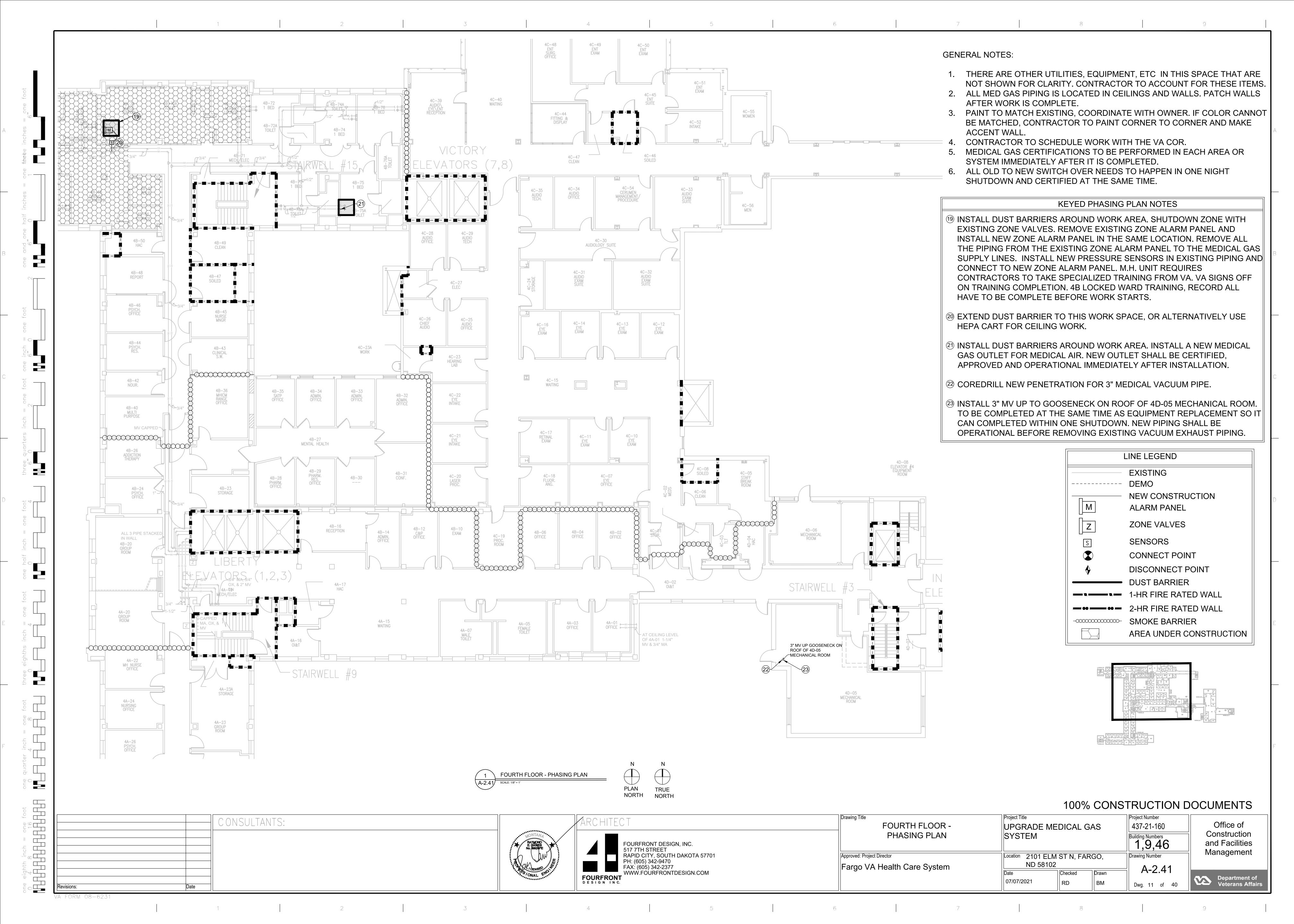
07/07/2021

Office of Construction and Facilities Management

Department of Veterans Affairs







AIR SEPARATOR MECHANICAL CONTRACTOR ASME AMERICAN SOCIETY OF MECHANICAL ENGINEERS MECHANICAL MANUFACTURER BRAKE HORSEPOWER MINIMUM BUILDING MANAGEMENT SYSTEM MINUTE MILLIMETER COMPRESSED AIR MEDICAL VACUUM CFM CUBIC FEET PER MINUTE CENTERLINE CLEANOUT CO NORMALLY CLOSED COEF COEFFICIENT NOISE CRITERIA LEVEL COMLINK COMMUNICATION LINK NATIONAL FIRE PROTECTION ASSOCIATION COND CONDENSATION NATURAL GAS CONFIG CONFIGURED

PASCAL

PRESSURE DROP

THERMOSTAT

TYPICAL

VOLTS

WET BULB

MEDICAL VACUUM

INCHES OF WATER

ZONE ALARM PANEL

VALVE OR DAMPER CONTROLLER

ZONE VALVE BOX

NORMALLY OPEN CONTRACTING OFFICER'S REPRESENTATIVE NATIONAL PIPE THREAD CONTROL VALVE FLOW COEFFICIENT OXYGEN ORD OVERFLOW ROOF DRAIN DAMPER DIRECT CURRENT DEGREES DIFFERENTIAL

PRESSURE **EXISTING** POUNDS PER SQUARE INCH - GAUGE EXHAUST AIR ENERGY CONTROL CENTER QUANT. QUANTITY ELECTRICAL **ELEVATION** ENTERING

RETURN AIR **FAHRENHEIT** REHEAT STEAM COIL - AHU FLOOR DRAIN **ROOF DRAIN** FLOOR SINK RESIDENT ENGINEER FILTER REQUIRED FEET PER MINUTE REVOLUTIONS PER MINUTE FEET

SUPPLY SQUARE FEET SPECIFICATION GENERAL CONTRACTOR STAINLESS STEEL GALLONS PER MINUTE THOUSAND BRITISH THERMAL UNITS PER HOUR

HORSEPOWER HOUR HEATING, VENTILATION, AND AIR CONDITIONING HEAT EXCHANGER HERTZ

COR

DAMP.

DC

DEG

DIFF.

ECC

ELEV

ENT

FS

FILT.

FPM

I/O

4 8 16

ELECT.

CV

INTERNATIONAL BUILDING CODE INTERNAIONAL ENERGY CONSERVATION CODE INTEGRAL FACE AND BYPASS IFB INTERNATIONAL MECHANICAL CODE

INPUT/OUTPUT

INTERNATIONAL PLUMBING CODE LENGTH LABORATORY EQUIPMENT COMPRESSED AIR POUNDS

PLUMBING SYMBOLS

BALANCING VALVE

PIPE UNION

PIPE DOWN 3-WAY CONTROL VALVE 2-WAY CONTROL VALVE PIPE UP CHECK VALVE

PIPE TEE DOWN VALVE GLOBE VALVE

FLOW CONTROL VALVE GLOBE VALVE - ON/OFF

PRESSURE REDUCING VALVE GLOBE VALVE - MODULATING

REDUCED PRESSURE ZONE VALVE TEMPERATURE SENSOR PRESSURE RELIEF VALVE

TEST PLUG SOLENOID VALVE 

PRESSURE GAUGE POINT OF DISCONNECTION

THERMOMETER ---- TO BE DEMOLISHED

PLUMBING PLAN NOTE CONCENTRIC REDUCER

GLOBE VALVE -MANUAL

GENERAL PLUMBING NOTES:

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC), INTERNATIONAL PLUMBING CODE (IPC), INTERNATIONAL FUEL GAS CODE (IFGC), NFPA 99, NFPA 101 LIFE SAFETY CODE, AND ANY AUTHORITY HAVING JURISDICTION. THIS IS A FEDERAL PROJECT, AS SUCH ALL CODE REQUIREMENTS

ALL EQUIPMENT, MATERIALS, AND ARTICLES INCORPORATED IN THE WORK SHALL BE NEW AND OF COMPARABLE QUALITY AS SPECIFIED. ALL WORKMANSHIP SHALL BE FIRST-CLASS AND SHALL BE PERFORMED BY MECHANICS SKILLED AND REGULARLY EMPLOYED IN THEIR RESPECTIVE TRADES.

ALL WORK SHALL BE COORDINATED WITH ALL AFFECTED TRADES PRIOR TO STARTING WORK. REWORK REQUIRED DUE TO COORDINATION ISSUES SHALL BE PERFORMED BY THE INSTALLATION CONTRACTOR WITHOUT INCREASED COST TO

THESE DRAWINGS ARE GENERAL IN NATURE. ALTHOUGH EVERY ATTEMPT HAS BEEN MADE TO INDICATE THE EXACT ROUTING AND LOCATION OF PROPOSED SYSTEMS, NOT ALL OFFSETS, REQUIRED FITTINGS AND/OR CONDITIONS CAN BE SHOWN. THE CONTRACTOR SHALL COORDINATE WORK AND MAKE REQUIRED CHANGES TO THE ROUTING IN ORDER TO AVOID CONFLICTS WITHOUT ANY INCREASED COST TO THE

SYSTEMS DESIGNATED TO BE PROVIDED AND INSTALLED WITHIN THESE CONTRACT DOCUMENTS ARE INTENDED TO BE COMPLETE AND OPERATIONAL. PROVIDE EVERYTHING ESSENTIAL FOR THE COMPLETION OF THE WORK TO MAKE THE SYSTEM READY FOR NORMAL AND PROPER OPERATION, INCLUDING ALL WORK OR MATERIALS NOT DIRECTLY SHOWN ON THE DRAWINGS OR IN THE SPECIFICATIONS, BUT NECESSARY FOR THE PROPER OPERATION OF THE SYSTEM.

CLEARANCES ARE MAINTAINED. CORRIDORS SHALL NOT BE COMPLETELY BLOCKED BY DUST BARRIERS. AT LEAST HALF OF THE CORRIDORS SHALL BE OPEN. CLOSE COORDINATION WILL BE REQUIRED WITH THE MECHANICAL PIPING, HVAC, FIRE PROTECTION, ELECTRICAL CONTRACTOR AND VA COR.

PLUMBING CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER MAINTENANCE

TURN OVER REMOVED EQUIPMENT AND SENSORS TO THE VA FOR SPARE PARTS OR DISPOSE OFF IF NOT WANTED BY FARGO VA BIOMED STAFF.

THE CONTRACTOR WILL BE ADDING NEW WALL PENETRATIONS IN A VARIETY OF WALL TYPES TO COMPLETE THIS PROJECT. ALL PENETRATIONS WILL BE SEALED MINIMALLY FOR SMOKE AND FIRE SPREAD. FOR RATED WALL SHOWN ON PLANS, THE CONTRACTOR SHALL SUBMIT AND PROVIDE UL LISTED PENETRATION FOR EACH APPROPRIATE RATED ASSEMBLY PENETRATION. ALL PENETRATIONS SHALL BE SEALED AT THE END OF WORK SHIFT TO AVOID LEAVING AN OPENING OVERNIGHT.

CONTRACTOR TO UTILIZE ON-SITE HEPA CART FOR CONTAINMENT OF CEILING WORK. COORDINATE USAGE AND REQUIREMENT WITH THE VA. AT CONTRACTOR OPTION, THEY MAY PROVIDE THEIR OWN HEPA CART(S) FOR CONTAINMENT OF CEILING WORK.

EQUIPMENT NOTE: ALL EQUIPMENT SHOWN IN THESE SCHEDULES ARE BASIS OF DESIGN. OR EQUALS WILL BE ACCEPTED.

| MEDICAL GAS ZONE ALARM SCHEDULE |  |       |  |  |  |
|---------------------------------|--|-------|--|--|--|
| ITEM                            | MANUFACTURER & MODEL                                       | NOTES |  |  |  |
| TOUCH AREA ZONE<br>ALARM PANEL  | BEACON MEDAES AREA ALARM PANEL<br>M3-A10 OR EQUAL          | 1     |  |  |  |
|                                 | O VERIFY FINAL ALARM GAS TYPES AND IELD PRIOR TO ORDERING. |       |  |  |  |

| MEDICAL GAS MANIFOLD SCHEDULE |                                   |  |             |       |  |  |  |  |
|-------------------------------|-----------------------------------|--|-------------|-------|--|--|--|--|
| ITEM                          | GAS                               | MANUFACTURER & MODEL                       | DESCRIPTION | NOTES |  |  |  |  |
| MGM-1                         | NITROGEN                          | AMICO M4D-DL-HH-U-NIT OR EQUAL             | MANIFOLD    | 1     |  |  |  |  |
| MIGNI-1 NITROGEN              | AMICO M2-HBXS-08E-NIT-SS OR EQUAL | HEADER                                     | 1           |       |  |  |  |  |
| MGM-2 NITROUS                 |                                   | AMICO M4D-DL-HH-U-N2O OR EQUAL             | MANIFOLD    | 1     |  |  |  |  |
| IVIGIVI-2                     | NITKOUS                           | AMICO M2-HBXS-08E-N2O-SS OR EQUAL          | HEADER      | 1     |  |  |  |  |
| NOTES: 1. CO                  | NNECT TO EXI                      | STING POWER AND MEDICAL PIPE LEAVING MANII | FOLD ROOM   |       |  |  |  |  |

| MEDICAL GAS EXTERIOR INLET SCHEDULE |   |  |       |  |  |  |  |  |
|-------------------------------------|---|--|-------|--|--|--|--|--|
| ITEM                                | TYPE  | MANUFACTURER & MODEL   | NOTES |  |  |  |  |  |
| MGI-1                               | VACUUM INLET                                    | TRI-TECH MEDICAL EOSC-T-LPS2 OR EQUAL  | 1,3   |  |  |  |  |  |
| MGI-2                               | MEDICAL AIR INLET                               | TRI-TECH MEDICAL EOSC-T-LPS1 OR EQUAL  | 2,3   |  |  |  |  |  |
| PR<br>RE                            | RESSURE GASEOUS OXYGE<br>-LABEL WITH "TEMPORAR" | PADLOCKING EXTERIOR BOX LABELED "EMERGEN<br>EN INLET". CONTRACTOR TO REMOVE LABEL AND<br>Y MEDICAL VACUUM INLET CONNECTION".<br>PADLOCKING EXTERIOR BOX LABELED "EMERGEN |       |  |  |  |  |  |

INCLUDES PROVISIONS FOR PADLOCKING EXTERIOR SURFACE MOUNTED BOX.

| MEDICAL GAS OUTLET SCHEDULE |  |                       |                                  |       |  |  |  |
|-----------------------------|--|-----------------------|----------------------------------|-------|--|--|--|
| ITEM                        |  | TYPE                  | MANUFACTURER & MODEL             | NOTES |  |  |  |
| MGO-1                       |  | MEDICAL AIR FACEPLATE | BEACONMEDAES 4107210167 OR EQUAL | 1     |  |  |  |

|       |                        |                    |                                   | ELECTRICAL          |      |           | ELECTRICAL                                      |       | CTRICAL |  |  |
|-------|------------------------|--------------------|-----------------------------------|---------------------|------|-----------|---|-------|---------|--|--|
| ITEM  | TANK SIZE<br>(GALLONS) | CAPACITY<br>(SCFM) | TYPE                              | MOTOR<br>(hp (qty)) | FLA  | VOLTPHCY. | MANUFACTURER & MODEL                            | NOTES |         |  |  |
| VAC-1 | 200                    | 154 @ 19" HG       | MEDICAL OIL-LESS<br>VACUUM SYSTEM | 8.7 (x3)            | 90.3 | 208-3-60  | BEACONMEDAES - VHS08T-200V-T_V TRIPLEX OR EQUAL | 1,2   |         |  |  |

OWNER TO PROVIDE PADLOCKS.

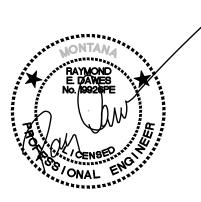
| MEDICAL AIR COMPRESSOR SCHEDULE |                        |                    |  |                     |     |     |           |                                  |       |
|---------------------------------|------------------------|--------------------|--|---------------------|-----|-----|-----------|----------------------------------|-------|
|                                 | ELECTRICAL             |                    |  |                     |     |     |           |                                  |       |
| ITEM                            | TANK SIZE<br>(GALLONS) | CAPACITY<br>(SCFM) | TYPE                                   | MOTOR<br>(hp (qty)) | FLA | MCA | VOLTPHCY. | MANUFACTURER & MODEL             | NOTES |
| MAC-1                           | 120                    | 142.8 @ 50 PSI     | MEDICAL SCROLL<br>AIR COMPRESSOR       | 50 (x5)             | 58  | 80  | 208-3-60  | CHAMPION - BCAS10P-12-M OR EQUAL | 1,2   |
| 2. PA                           |                        | SKID IS TO FIT I   | ONE COMPRESSOR I<br>N DESIGNATED EQUII |                     |     |     | O INCLUDE | INTEGRAL CONTROL PANEL, AND REMO | TE    |

—GAS SENSOR ASSEMBLY CONTAINING GAS SPECIFIC SENSOR, CHECK FITTING, AND COPPER TUBE. WIRING TO ZONE ALARM PANEL -COPPER TEE AND TUBE FOR NEW SENSOR. COORDINATE SIZE AND LENGTH REQUIREMENTS WITH SUPPLIED MANUFACTURER. NOTE: CONTRACTOR TO LOCATE ZONE GAS SENSORS AS ─MEDGAS ZONE PIPING CLOSE TO THE ZONE ALARM DOWNSTREAM OF THE ZONE DOWNSTREAM OF ZONE VALVE IN A LOCATION THAT IS ACCESSIBLE FOR VALVE MAINTENANCE AND REPAIR/REPLACEMENT OF SENSORS ZONE ALARM SENSOR DETAIL

# 100% CONSTRUCTION DOCUMENTS

Dwg. 12 of 40

CONSULTANTS:



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GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND SCHEDULES Approved: Project Director

Fargo VA Health Care System

Project Title Project Number 437-21-160 UPGRADE MEDICAL GAS SYSTEM Building Numbers 1,9,46 Location 2101 ELM ST N, FARGO, ND 58102 P-0.01 Checked 07/07/2021

RD

Office of Construction and Facilities Management