# FRESNO REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

# VA CENTRAL CALIFORNIA HEALTHCARE SYSTEM

BID SET

## FRESNO, CALIFORNIA

### PROJECT TEAM

OWNER:
VACCHCS
2615 E. CLINTON AVE
FRESNO, CA 93703-2223

MECHANICAL AND ELECTRICAL ENGINEERING:
DAVENERGY SOLUTIONS

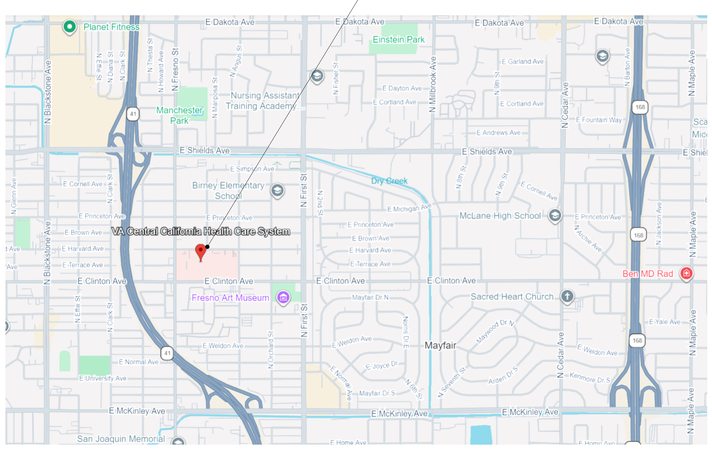
CIVIL ENGINEERING:
(VCI) VALI COOPER INTERNATIONAL

ARCHITECTURE:
SEVEN GENERATIONS A+E

STRUCTURAL ENGINEERING:
SIMPSON GUMPERTZ & HEGER

FIRE PROTECTION ENGINEERING:
VELTRE ENGINEERING

### LOCATION MAP

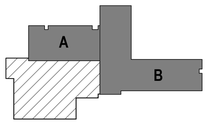



FRESNO , CALIFORNIA

NORTH

### DRAWING SHEET INDEX


| SHEET | DESCRIPTION |
|---|---|
| GENERAL | |
| G001 | COVER SHEET |
| G002 | GENERAL INFORMATION & SYMBOL LEGEND |
| LIFE SAFETY | |
| GI001 | GENERAL NOTES AND ABBREVIATIONS |
| GI002 | GENERAL NOTES |
| GI101A | SUBBASEMENT PLAN LIFE SAFETY - AREA A |
| GI101B | SUBBASEMENT PLAN LIFE SAFETY - AREA B |
| GI102A | BASEMENT PLAN LIFE SAFETY - AREA A |
| GI102B | BASEMENT PLAN LIFE SAFETY - AREA B |
| GI103A | FIRST FLOOR PLAN LIFE SAFETY - AREA A |
| GI103B | FIRST FLOOR PLAN LIFE SAFETY - AREA B |
| GI104A | SECOND FLOOR PLAN LIFE SAFETY - AREA A |
| GI104B | SECOND FLOOR PLAN LIFE SAFETY - AREA B |
| GI105A | THIRD FLOOR PLAN LIFE SAFETY - AREA A |
| GI105B | THIRD FLOOR PLAN LIFE SAFETY - AREA B |
| GI106A | FOURTH FLOOR PLAN LIFE SAFETY - AREA A |
| GI106B | FOURTH FLOOR PLAN LIFE SAFETY - AREA B |
| GI107A | FIFTH FLOOR PLAN LIFE SAFETY - AREA A |
| GI107B | FIFTH FLOOR PLAN LIFE SAFETY - AREA B |
| GI108B | SIXTH FLOOR PLAN LIFE SAFETY - AREA B |
| GI109B | SEVENTH FLOOR PLAN LIFE SAFETY - AREA B |
| CIVIL | |
| CG101 | CIVIL GENERAL NOTES |
| V-101 | TOPOGRAPHICAL SURVEY |
| C-101 | SITE PLAN |
| CD101 | DEMOLITION PLAN |
| C-102 | UTILITY PLAN |
| C-501 | DETAILS |
| STRUCTURAL | |
| S-001 | GENERAL NOTES |
| S-030 | TYPICAL CONCRETE DETAILS |
| S-050 | TYPICAL STEEL DETAILS |
| S-102A | BASEMENT STRUCTURAL PLAN - AREA A |
| S-102B | BASEMENT STRUCTURAL PLAN - AREA B |
| S-103A | FIRST FLOOR STRUCTURAL PLAN - AREA A |
| S-104A | SECOND FLOOR STRUCTURAL PLAN - AREA A |
| S-105A | THIRD FLOOR STRUCTURAL PLAN - AREA A |
| S-106A | FOURTH FLOOR STRUCTURAL PLAN - AREA A |
| S-107A | FIFTH FLOOR STRUCTURAL PLAN - AREA A |
| S-108A | SIXTH FLOOR STRUCTURAL PLAN- AREA A |
| S-109B | SEVENTH FLOOR STRUCTURAL PLAN - AREA B |
| ARCHITECTURAL | |
| AD001 | DEMOLITION, PHASING, ICRA GENERAL NOTES & DETAILS |
| AD101A | SUB-BASEMENT DEMO PLAN - AREA A |
| AD101B | SUB-BASEMENT DEMO PLAN - AREA B |
| AD102A | BASEMENT DEMO PLAN - AREA A |
| AD102B | BASEMENT DEMO PLAN - AREA B |
| AD103A | FIRST FLOOR DEMO PLAN - AREA A |
| AD103B | FIRST FLOOR DEMO PLAN - AREA B |
| AD104A | SECOND FLOOR DEMO PLAN - AREA A |
| AD104B | SECOND FLOOR DEMO PLAN - AREA B |
| AD105A | THIRD FLOOR DEMO PLAN - AREA A |
| AD105B | THIRD FLOOR DEMO PLAN - AREA B |
| AD106A | FOURTH FLOOR DEMO PLAN - AREA A |
| AD106B | FOURTH FLOOR DEMO PLAN - AREA B |
| AD107A | FIFTH FLOOR DEMO PLAN - AREA A |
| AD107B | FIFTH FLOOR DEMO PLAN - AREA B |
| AD108B | SIXTH FLOOR DEMO PLAN - AREA B |
| AD109B | SEVENTH FLOOR DEMO PLAN - AREA B |
| AE101A | SUB-BASEMENT FLOOR PLAN - AREA A |
| AE101B | SUB-BASEMENT FLOOR PLAN - AREA B |
| AE102A | BASEMENT FLOOR PLAN - AREA A |
| AE102B | BASEMENT FLOOR PLAN - AREA B |
| AE103A | FIRST FLOOR PLAN - AREA A |
| AE103B | FIRST FLOOR PLAN - AREA B |
| AE104A | SECOND FLOOR PLAN - AREA A |
| AE104B | SECOND FLOOR PLAN - AREA B |
| AE105A | THIRD FLOOR PLAN - AREA A |
| AE105B | THIRD FLOOR PLAN - AREA B |
| AE106A | FOURTH FLOOR PLAN - AREA A |
| AE106B | FOURTH FLOOR PLAN - AREA B |
| AE107A | FIFTH FLOOR PLAN - AREA A |
| AE107B | FIFTH FLOOR PLAN - AREA B |
| AE108B | SIXTH FLOOR PLAN - AREA B |
| AE109B | SEVENTH FLOOR PLAN - AREA B |
| AC101A | SUB-BASEMENT REFLECTED CEILING PLAN - AREA A |
| AC101B | SUB-BASEMENT REFLECTED CEILING PLAN - AREA B |
| AC102A | BASEMENT REFLECTED CEILING PLAN - AREA A |
| AC102B | BASEMENT REFLECTED CEILING PLAN - AREA B |
| AC103A | FIRST FLOOR REFLECTED CEILING PLAN - AREA A |
| AC103B | FIRST FLOOR REFLECTED CEILING PLAN - AREA B |
| AC104A | SECOND FLOOR REFLECTED CEILING PLAN - AREA A |
| AC104B | SECOND FLOOR REFLECTED CEILING PLAN - AREA B |
| AC105A | THIRD FLOOR REFLECTED CEILING PLAN - AREA A |
| AC105B | THIRD FLOOR REFLECTED CEILING PLAN - AREA B |
| AC106A | FOURTH FLOOR REFLECTED CEILING PLAN - AREA A |
| AC106B | FOURTH FLOOR REFLECTED CEILING PLAN - AREA B |
| AC107A | FIFTH FLOOR REFLECTED CEILING PLAN - AREA A |
| AC107B | FIFTH FLOOR REFLECTED CEILING PLAN - AREA B |
| AC108B | SIXTH FLOOR REFLECTED CEILING PLAN - AREA B |
| AC109B | SEVENTH FLOOR REFLECTED CEILING PLAN - AREA B |
| FIRE PROTECTION | |
| FP001 | GENERAL NOTES AND ABBREVIATIONS |
| FP101A | SUBBASEMENT PLAN FIRE PROTECTION - AREA A |
| FP101B | SUBBASEMENT PLAN FIRE PROTECTION - AREA B |
| FP102A | BASEMENT PLAN FIRE PROTECTION - AREA A |
| FP102B | BASEMENT PLAN FIRE PROTECTION - AREA B |
| FP103A | FIRST FLOOR PLAN FIRE PROTECTION - AREA A |
| FP103B | FIRST FLOOR PLAN FIRE PROTECTION AREA B |
| FP104A | SECOND FLOOR PLAN FIRE PROTECTION - AREA A |
| FP104B | SECOND FLOOR PLAN FIRE PROTECTION - AREA B |
| FP105A | THIRD FLOOR PLAN FIRE PROTECTION - AREA A |
| FP105B | THIRD FLOOR PLAN FIRE PROTECTION - AREA B |
| FP106A | FOURTH FLOOR PLAN FIRE PROTECTION - AREA A |
| FP106B | FOURTH FLOOR PLAN FIRE PROTECTION - AREA B |
| FP107A | FIFTH FLOOR PLAN FIRE PROTECTION - AREA A |
| FP107B | FIFTH FLOOR PLAN FIRE PROTECTION - AREA B |
| FP108B | SIXTH FLOOR PLAN FIRE PROTECTION - AREA B |
| FP109B | SEVENTH FLOOR PLAN FIRE PROTECTION - AREA B |
| FIRE ALARM | |
| FA001 | GENERAL NOTES AND ABBREVIATIONS |
| FA101A | SUBBASEMENT PLAN FIRE ALARM - AREA A |
| FA101B | SUBBASEMENT PLAN FIRE ALARM - AREA B |
| FA102A | BASEMENT PLAN FIRE ALARM - AREA A |
| FA102B | BASEMENT PLAN FIRE ALARM - AREA B |
| FA103A | FIRST FLOOR PLAN FIRE ALARM - AREA A |
| FA103B | FIRST FLOOR PLAN FIRE ALARM - AREA B |
| FA104A | SECOND FLOOR PLAN FIRE ALARM - AREA A |
| FA104B | SECOND FLOOR PLAN FIRE ALARM - AREA B |
| FA105A | THIRD FLOOR PLAN FIRE ALARM - AREA A |
| FA105B | THIRD FLOOR PLAN FIRE ALARM - AREA B |
| FA106A | FOURTH FLOOR PLAN FIRE ALARM - AREA A |
| FA106B | FOURTH FLOOR PLAN FIRE ALARM - AREA B |
| FA107A | FIFTH FLOOR PLAN FIRE ALARM - AREA A |
| FA107B | FITH FLOOR PLAN ALARM - AREA B |
| FA108B | SIXTH FLOOR PLAN FIRE ALARM - AREA B |
| FA109B | SEVENTH FLOOR PLAN FIRE ALARM - AREA B |
| MECHANICAL | |
| M-001 | MECHANICAL COVER SHEET |
| M-002 | MECHANICAL PHASING PLAN |
| MP101A-1 | SUBBASEMENT CHILLED WATER TEMPORARY PIPING - WEST |
| MP101B-1 | SUBBASEMENT CHILLED WATER TEMPORARY PIPING - EAST |
| MD101A-1 | SUBBASEMENT CHILLED WATER PIPING DEMOLITION - WEST |
| MD101B-1 | SUBBASEMENT CHILLED WATER PIPING DEMOLITION - EAST |
| MP101A-2 | SUBBASEMENT CHILLED WATER PIPING NEW WORK- WEST |
| MP101B-2 | SUBBASEMENT CHILLED WATER PIPING NEW WORK - EAST |
| MP101A-3 | SUBBASEMENT CONDENSATE LATERAL PIPING NEW WORK- WEST |
| MP101B-3 | SUBBASEMENT CONDENSATE LATERAL PIPING NEW WORK - EAST |
| MP101A-4 | SUBBASEMENT CONDENSATE RISER NEW WORK- WEST |
| MP101B-4 | SUBBASEMENT CONDENSATE RISER NEW WORK - EAST |
| MD101A-3 | SUBBASEMENT CONDENSATE RISER DEMOLITION - WEST |
| MD101B-3 | SUBBASEMENT CONDENSATE RISER DEMOLITION - EAST |
| MP102A-1 | BASEMENT CHILLED WATER RISER NEW WORK - WEST |
| MD102A-1 | BASEMENT CHILLED WATER PIPING DEMOLITION - WEST |
| MD102B-1 | BASEMENT CHILLED WATER PIPING DEMOLITION - EAST |
| MP102A-2 | BASEMENT CHILLED WATER LATERAL NEW WORK - WEST |
| MP102B-2 | BASEMENT CHILLED WATER LATERAL NEW WORK - EAST |
| MD102A-2 | BASEMENT CONDENSATE RISER DEMOLITION - WEST |
| MD102B-2 | BASEMENT CONDENSATE RISER DEMOLITION - EAST |
| MP102A-3 | BASEMENT CONDENSATE RISER NEW WORK - WEST |
| MP102B-3 | BASEMENT CONDENSATE RISER NEW WORK - EAST |
| MP103A-1 | FLOOR 1 CHILLED WATER RISER NEW WORK - WEST |
| MD103A-1 | FLOOR 1 CHILLED WATER PIPING DEMOLITION - WEST |
| MD103B-1 | FLOOR 1 CHILLED WATER PIPING DEMOLITION - EAST |
| MP103A-2 | FLOOR 1 CHILLED WATER LATERAL NEW WORK - WEST |
| MP103B-2 | FLOOR 1 CHILLED WATER LATERAL NEW WORK - EAST |
| MD103A-2 | FLOOR 1 CONDENSATE RISER DEMOLITION - WEST |
| MD103B-2 | FLOOR 1 CONDENSATE RISER DEMOLITION - EAST |
| MP103A-3 | FLOOR 1 CONDENSATE RISER NEW WORK - WEST |
| MP103B-3 | FLOOR 1 CONDENSATE RISER NEW WORK - EAST |
| MP104A-1 | FLOOR 2 CHILLED WATER RISER NEW WORK - WEST |
| MD104A-1 | FLOOR 2 CHILLED WATER PIPING DEMOLITION - WEST |
| MD104B-1 | FLOOR 2 CHILLED WATER PIPING DEMOLITION - EAST |
| MP104A-2 | FLOOR 2 CHILLED WATER LATERAL NEW WORK - WEST |
| MP104B-2 | FLOOR 2 CHILLED WATER LATERAL NEW WORK - EAST |
| MD104A-2 | FLOOR 2 CONDENSATE RISER DEMOLITION - WEST |
| MD104B-2 | FLOOR 2 CONDENSATE RISER DEMOLITION - EAST |
| MP104A-3 | FLOOR 2 CONDENSATE RISER NEW WORK - WEST |
| MP104B-3 | FLOOR 2 CONDENSATE RISER NEW WORK - EAST |
| MP105A-1 | FLOOR 3 CHILLED WATER RISER NEW WORK - WEST |
| MP105B-3 | FLOOR 3 CONDENSATE RISER NEW WORK- EAST |
| MD105B-1 | FLOOR 3 CHILLED WATER PIPING DEMOLITION - EAST |
| MP105B-2 | FLOOR 3 CHILLED WATER LATERAL NEW WORK - EAST |
| MD105A-2 | FLOOR 3 CONDENSATE RISER DEMOLITION - WEST |
| MD105B-2 | FLOOR 3 CONDENSATE RISER DEMOLITION - EAST |
| MP106A-1 | FLOOR 4 CHILLED WATER RISER NEW WORK - WEST |
| MD106A-2 | FLOOR 4 CONDENSATE RISER DEMOLITION - WEST |
| MD106B-2 | FLOOR 4 CONDENSATE RISER DEMOLITION - EAST |
| MP106B-3 | FLOOR 4 CONDENSATE RISER NEW WORK - EAST |
| MP107A-1 | FLOOR 5 CHILLED WATER RISER NEW WORK - WEST |
| MD107A-1 | FLOOR 5 CHILLED WATER PIPING DEMOLITION - WEST |
| MD107B-1 | FLOOR 5 CHILLED WATER PIPING DEMOLITION - EAST |
| MP107A-2 | FLOOR 5 CHILLED WATER LATERAL NEW WORK - WEST |
| MP107B-2 | FLOOR 5 CHILLED WATER LATERAL NEW WORK - EAST |
| MD107A-2 | FLOOR 5 CONDENSATE RISER DEMOLITION - WEST |
| MD107B-2 | FLOOR 5 CONDENSATE RISER DEMOLITION - EAST |
| MP107A-3 | FLOOR 5 CONDENSATE RISER NEW WORK - WEST |
| MP107B-3 | FLOOR 5 CONDENSATE RISER NEW WORK - EAST |
| MP108A-1 | FLOOR 6 CHILLED WATER RISER NEW WORK - WEST |
| MP108B-1 | FLOOR 6 CHILLED WATER RISER NEW WORK - EAST |
| MD108B-1 | FLOOR 6 CHILLED WATER PIPING DEMOLITION - EAST |
| MP108B-2 | FLOOR 6 CHILLED WATER LATERAL NEW WORK - EAST |
| MD108B-2 | FLOOR 6 CONDENSATE RISER DEMOLITION - EAST |
| MP108B-3 | FLOOR 6 CONDENSATE RISER NEW WORK - EAST |
| MP109B-1 | FLOOR 7 CHILLED WATER RISER NEW WORK - EAST |
| MD109B-2 | FLOOR 7 CONDENSATE RISER DEMOLITION - EAST |
| MP110B-1 | ROOF CHILLED WATER RISER NEW WORK |
| MD401 | SUBBASEMENT DEMOLITION ENLARGED VIEW |
| MP401 | SUBBASEMENT NEW WORK ENLARGED VIEW |
| M-501 | MECHANICAL DETAILS |
| M-601 | MECHANICAL SCHEDULES |
| M-602 | MECHANICAL SCHEDULES |
| M-701 | MECHANICAL RISER DIAGRAM |
| M-702 | PUMP CONTROLS DIAGRAM AND SEQUENCE OF OPERATIONS |
| M-703 | PUMP CONTROL POINT SCHEDULE |
| M-704 | SEASONAL CHANGE OVER VALVE SEQUENCE OF OPERATIONS |
| M-705 | SEASONAL CHANGE OVER VALVE CONTROL POINT SCHEDULE |
| MP901 | MECHANICAL RISER ISOMETRIC DIAGRAM |
| ELECTRICAL | |
| E-001 | ELECTRICAL COVER SHEET |
| ED-101B | SUB-BASEMENT DEMOLITION PLAN - EAST |
| ED-102A | BASEMENT DEMOLITION PLAN - WEST |
| ED-103A | 1ST FLOOR DEMOLITION PLAN - WEST |
| ED-103B | 1ST FLOOR DEMOLITION PLAN - EAST |
| ED-104B | 2ND FLOOR DEMOLITION PLAN - EAST |
| ED-105B | 3RD FLOOR DEMOLITION PLAN - EAST |
| EP-101B | SUB-BASEMENT POWER PLAN - EAST |
| EP-102A | BASEMENT POWER PLAN - WEST |
| EP-103A | 1ST FLOOR POWER PLAN - WEST |
| EP-103B | 1ST FLOOR POWER PLAN - EAST |
| EP-104B | 2ND FLOOR POWER PLAN - EAST |
| EP-105B | 3RD FLOOR POWER PLAN - EAST |
| EP-108A | 6TH FLOOR POWER PLAN - WEST |
| E-601 | ELECTRICAL SINGLE LINE DIAGRAMS AND SCHEDULES |


SCALE:

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

SEVEN GENERATIONS ARCHITECTURE + ENGINEERING
600 E. MICHIGAN AVE., SUITE B
KALAMAZOO, MI 49007
269-927-0144

SEVEN GENERATIONS architecture +engineering

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE 1
SAN DIEGO, CA 22108
612-770-8552

DAVENERGY SOLUTIONS ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

05/04/2026

STATE OF MICHIGAN
MICHAEL HAWKINNY
ARCHITECT
No. 38315312
LICENSED ARCHITECT

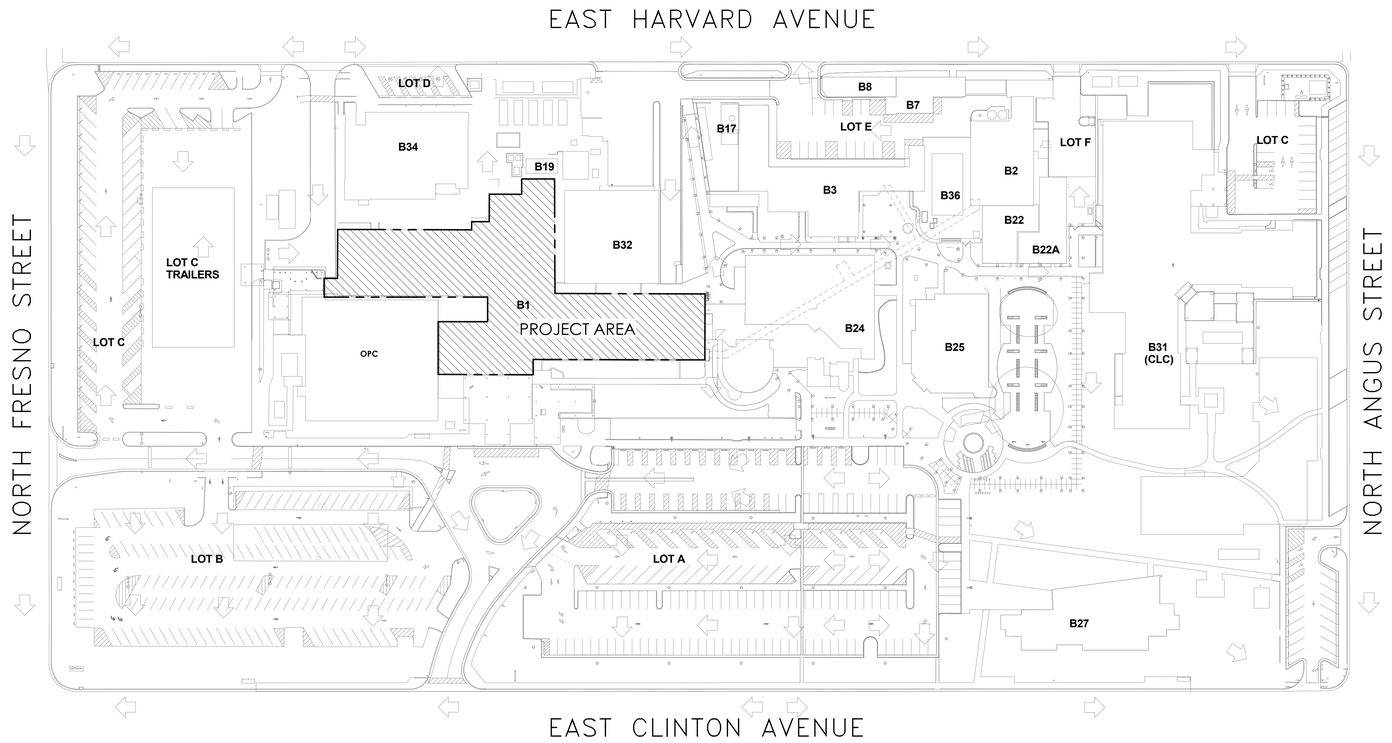
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| Drawing Title | Phase | Project Title | Project Number |
|---|---|---|---|
| COVER SHEET | BID SET | REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC | 570-20-308 |
| Approved: | - | Location: FRESNO VA HOSPITAL, 2615 E. CLINTON AVE, FRESNO, CA 93703 | Building Number: N/A |
| | | Issue Date: 05/04/2026 · Checked: MH · Drawn: TC | Drawing Number: G001 |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/222010 VA Fresno Chilled Water Infrastructure_ARCH-R23.rvt 5/5/2026 11:56:10 AM



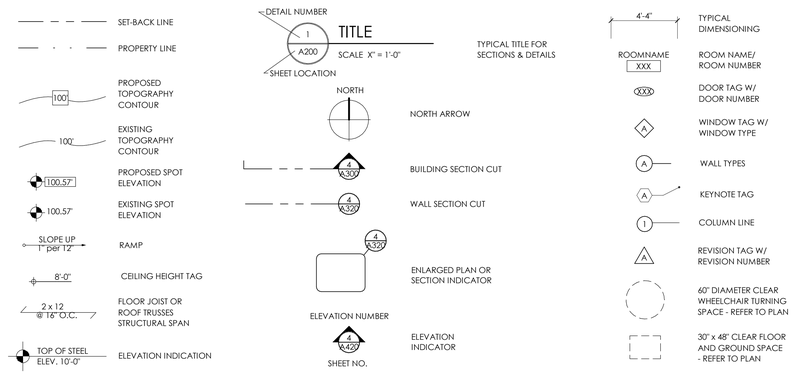

## CAMPUS MAP

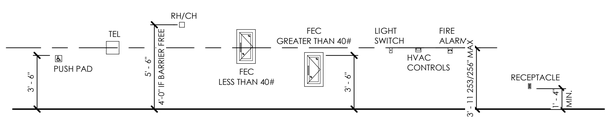
SCALE: 1" = 60'-0"

## ABBREVIATIONS

| | |
|---|---|
| @ | AT |
| A/C | AIR CONDITIONING/AIR CONDITIONER |
| ACOUS | ACOUSTICAL |
| AD | AREA DRAIN, AUTOMATIC DAMPER |
| ADJ | ADJUST, ADJUSTABLE |
| ALUM | ALUMINUM |
| AP | ACCESS PANEL |
| ACT | ACOUSTICAL CEILING |
| B | BASE |
| BAR | BARRIER |
| BD | BOARD |
| BF | BARRIER FREE |
| BKT | BRACKET |
| BLDG | BUILDING |
| BLKG | BLOCKING |
| BOTT | BOTTOM |
| C TO C | CENTER TO CENTER |
| CAB | CABINET |
| CE | COLUMN ENCLOSURE |
| CIR | CIRCLE |
| CIR | CIRCUIT |
| CL | CENTER LINE, CLEARANCES |
| CLG | CEILING |
| CJ | CONTROL JOINT |
| CLKG | CAULKING |
| CLO | CLOSET |
| CMT | CERAMIC MOSAIC TILE |
| CMU | CONCRETE MASONRY UNIT |
| CO | CLEANOUT |
| COL | COLUMN |
| CONC | CONCRETE |
| CONT | CONTINUOUS |
| CORR | CORRIDOR |
| CPT | CARPET |
| CSS | CLINICAL SERVICE SINK |
| CT | CERAMIC TILE |
| CTR | CENTER |
| CUH | CABINET UNIT HEATER |
| DEMO | DEMOLITION, DEMOLISH |
| DEPT | DEPARTMENT |
| DF | DRINKING FOUNTAIN |
| DIA, D | DIAMETER |
| DIM | DIMENSION |
| DN | DOWN |
| DR | DRAIN |
| DS | DOWNSPOUT |
| ELECT | ELECTRICAL |
| ELEV | ELEVATION |
| ENTR | ENTRANCE |
| EQ | EQUAL |
| EP | ELECTRICAL PANEL |
| EXH | EXHAUST |
| EXP | EXPOSED |
| EXIST | EXISTING, EXSIST'G |
| EXT | EXTERIOR |
| EW | EACH WAY |
| FA | FIRE ALARM |
| FD | FIRE DAMPER OR FLOOR DRAIN |
| FE | FIRE EXTINGUISHER |
| FEC | FIRE EXTINGUISHER CABINET |
| FIN | FINISH |
| FL, FLR | FLOOR FINISH |
| FLG, FLRG | FLOORING, FLOOR'G |
| FURN | FURNITURE, FURNACE |
| FWC | FABRIC WALL COVERING |
| FT | FEET, FOOT |
| GALV | GALVANIZE(D) |
| GL | GLASS |
| GSB | GYPSUM SHEATHING BOARD |
| GWB | GYPSUM WALLBOARD |
| GYP. BD | GYPSUM BOARD |
| ID | INSIDE DIAMETER |
| INSUL | INSULATION |
| IN | INCH(ES) |
| JAN | JANITOR'S CLOSET |
| HM | HOLLOW METAL |
| HORIZ | HORIZONTAL |
| HR | HANDRAIL |
| HT | HEIGHT |
| HW | HEADWALL |
| LAM | LAMINATED |
| LF | LINEAL FEET |
| MAS | MASONRY |
| MAT'L | MATERIAL |
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| MANUF | MANUFACTURED, MANUFACTURER |
| MIN | MINIMUM |
| MLD'G | MOLDING |
| MTL | METAL |
| N | NORTH |
| NAT | NATURAL |
| NIC | NOT IN CONTRACT |
| NORM | NORMAL |
| NTS | NOT TO SCALE |
| O.C. | ON CENTER |
| OPN'G | OPENING |
| O, O2 | OXYGEN |
| PLAST | PLASTIC |
| PNT | PAINT |
| PREFAB | PREFABRICATED |
| PLYWD | PLYWOOD, PLYW'D |
| R | RADIUS |
| RA | RETURN AIR |
| REQ'D | REQUIRED |
| RM | ROOM |
| S | SINK, SOUTH, SHINGLE |
| SA | SUPPLY AIR |
| SAN | SANITARY |
| SMKD | SMOKE DAMPER |
| SECT | SECTION |
| SHWR | SHOWER |
| SIM | SIMILAR |
| SPEC | SPECIFICATION |
| SQ | SQUARE |
| SS | SERVICE SINK, STAINLESS STEEL |
| STD | STANDARD |
| STOR | STORAGE |
| SUSP | SUSPEND(ED) |
| SYM | SYMBOL, SYMMETRICAL |
| TOIL | TOILET |
| TYP | TYPICAL |
| UNFIN | UNFINISHED |
| UTIL | UTILITY |
| VAC | VACUUM |
| VAV | VARIABLE AIR VOLUME |
| VCT | VINYL COMPOSITION TILE |
| VD | VOLUME DAMPER |
| VERT | VERTICAL |
| V.I.F. | VERIFY IN FIELD |
| VT | VINYL TILE |
| VWC | VINYL WALL COVERING |
| W/ | WITH |
| WC | WATER CLOSET |
| WD | WOOD |
| WNDW | WINDOW |
| W. HTR | WATER HEATER |
| W/O | WITHOUT |
| WP | WALL PROTECTION |

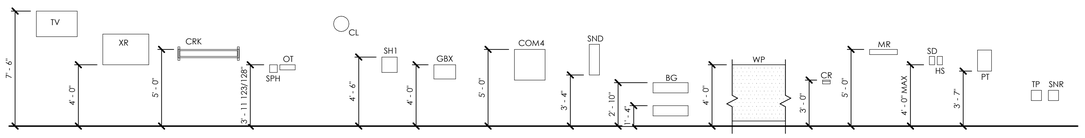
## ARCHITECTURAL SYMBOLS & PLAN INDICATORS



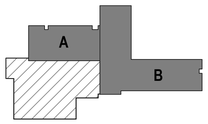

## TYP. CODE REGULATED MOUNTING HEIGHTS

SCALE: NONE




## TYP. EQUIPMENT MOUNTING HEIGHTS

SCALE: NONE




SCALE: As indicated

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

SEVEN GENERATIONS ARCHITECTURE + ENGINEERING
600 E. MICHIGAN AVE., SUITE B
KALAMAZOO, MI 49007
269-927-0144

SEVEN GENERATIONS architecture +engineering

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE 1
SAN DIEGO, CA 22108
612-770-8552

DAVENERGY SOLUTIONS ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

05/04/2026
STATE OF MICHIGAN
MICHAEL HANNINNY
ARCHITECT
No. 38315312
LICENSED ARCHITECT

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| Drawing Title | Phase | Project Title | Project Number |
|---|---|---|---|
| GENERAL INFORMATION & SYMBOL LEGEND | BID SET | REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC | 570-20-308 |
| Approved: | - | Location: FRESNO VA HOSPITAL, 2615 E. CLINTON AVE, FRESNO, CA 93703 | Building Number: N/A |
| | | Issue Date: 05/04/2026 · Checked: MH · Drawn: TC | Drawing Number: G002 |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/222010 VA Fresno Chilled Water Infrastructure_ARCH-R23.rvt
5/4/2026 4:13:51 PM

## APPLICABLE CODES, STANDARD, AND DESIGN CRITERIA

INTERNATIONAL BUILDING CODE (IBC)

- IBC (INTERNATIONAL BUILDING CODE) - 2024
- IEBC (INTERNATIONAL EXISTING BUILDING CODE) - 2024

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

- NFPA 1: FIRE CODE - 2024
- NFPA 3: STANDARD FOR COMMISSIONING OF FIRE PROTECTION AND LIFE SAFETY SYSTEMS - 2024
- NFPA 4: STANDARD FOR INTEGRATED FIRE PROTECTION AND LIFE SAFETY SYSTEM TESTING - 2024
- NFPA 10: STANDARD FOR PORTABLE FIRE EXTINGUISHERS - 2026
- NFPA 13: STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS - 2025
- NFPA 20: STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION - 2025
- NFPA 25: STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS - 2026
- NFPA 70: NATIONAL ELECTRICAL CODE - 2026
- NFPA 70E: STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE - 2024
- NFPA 72: NATIONAL FIRE ALARM CODE - 2025
- NFPA 80: STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES - 2025
- NFPA 90A: STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATING SYSTEMS - 2024
- NFPA 99: HEALTH CARE FACILITIES CODE - 2024
- NFPA 101:LIFE SAFETY CODE - 2024
- NFPA 220: STANDARD ON TYPES OF BUILDING CONSTRUCTION - 2024
- NFPA 241: STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS - 2022
- NFPA 291: RECOMMENDED PRACTICE FOR FIRE FLOW TESTING AND MARKING OF HYDRANTS - 2025

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

- NIST: STANDARDS OF SEISMIC SAFETY FOR EXISTING FEDERALLY OWNED AND LEASED BUILDINGS, ICSSC RECOMMENDED PRACTICE 10 (RP 10-22) (2023)

VA TECHNICAL INFORMATION LIBRARY (TIL)

- VA TIL: ARCHITECTURAL DESIGN MANUAL (2014)
- VA TIL: ELECTRICAL DESIGN MANUAL (2025)
- VA TIL: FIRE PROTECTION DESIGN MANUAL (2023)
- VA TIL: H-18-8 SEISMIC DESIGN REQUIREMENTS (2023)
- VA TIL:HVAC DESIGN MANUAL (2017)
- VA TIL: MEDICAL/SURGICAL INPATIENT UNITS & INTENSIVE CARE NURSING UNITS DESIGN GUIDE (2011)
- VA TIL: PHYSICAL SECURITY AND RESILIENCY DESIGN MANUAL (2020)
- VA TIL: PLUMBING DESIGN MANUAL (2026)

## ABBREVIATIONS

| | |
|---|---|
| ℄ | CENTERLINE |
| & | AND |
| @ | AT |
| ° | DEGREES |
| Ø | DIAMETER |
| ± | PLUS OR MINUS |
| AMB | AMBULATORY |
| ACU | AUTONOMOUS CONTROL UNIT |
| AFF | ABOVE FINISH FLOOR |
| AKA | ALSO KNOWN AS |
| C. | CONSTRUCTED IN |
| DEMO | DEMOLISH EXISTING |
| DFPE | DESIGNATED FIRE PROTECTION ENGINEER |
| DOR | DESIGNER OF RECORD |
| DWG | DRAWING |
| E | EXISTING |
| EA | EACH |
| ER | EXISTING RELOCATE |
| F | FAHRENHEIT |
| FA | FIRE ALARM |
| FACU | FIRE ALARM CONTROL UNIT |
| FDAS | FIRE DETECTION AND ALARM SYSTEM |
| FDC | FIRE DEPARTMENT CONNECTION |
| FP | FIRE PROTECTION |
| FPDM | FIRE PROTECTION DESIGN MANUAL |
| GFGI | GOVERNMENT FURNISHED, GOVERNMENT INSTALLED |
| GPM | GALLONS PER MINUTE |
| HR | HOUR |
| IBC | INTERNATIONAL BUILDING CODE |
| LED | LIGHT-EMITTING DIODE |
| LF | LINEAR FOOT |
| LH | LIGHT HAZARD |
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| MISC | MISCELLANEOUS |
| MIN | MINIMUM |
| N | NEW |
| NAC | NOTIFICATION APPLIANCE CIRCUIT |
| NDU | NETWORK DISPLAY UNIT |
| NFPA | NATIONAL FIRE PROTECTION ASSOCIATION |
| NR | NON-RATED |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OH | ORDINARY HAZARD |
| PIV | POST INDICATOR VALVE |
| PSI | POUNDS PER SQUARE INCH |
| QFPE | QUALIFIED FIRE PROTECTION ENGINEER |
| QTY | QUANTITY |
| R | RADIUS |
| REQD | REQUIRED |
| SF | SQUARE FEET |
| SOW | SCOPE OF WORK |
| TIL | TECHNICAL INFORMATION LIBRARY |
| TYP | TYPICAL |
| UDACT | UNIVERSAL DIGITAL ALARM COMMUNICATOR TRANSMITTER |
| UFC | UNIFIED FACILITIES CRITERIA |
| UNO | UNLESS NOTED OTHERWISE |
| VA | VETERAN AFFAIRS |
| VAC | VOLTS, ALTERNATING CURRENT |
| VDC | VOLTS, DIRECT CURRENT |
| W | WIDE/WIDTH |
| W/ | WITH |
| WP | WEATHERPROOF |

## INTERIM LIFE SAFETY MEASURES (ILSM)

COMPLY WITH SPECIFICATION SECTION 01 35 26 FOR INTERIM LIFE SAFETY MEASURES INCLUDING, BUT NOT LIMITED TO FIRE WATCH, HOT WORK PERMITS, ETC. INTERIM LIFE SAFETY MEASURES (ILSM) ARE TEMPORARY ACTIONS TAKEN TO MAINTAIN A SAFE ENVIRONMENT WHEN NORMAL FIRE AND LIFE SAFETY SYSTEMS ARE IMPAIRED DURING CONSTRUCTION, MAINTENANCE, OR OTHER EVENTS, ENSURING PROTECTION FOR OCCUPANTS. THIS PROJECT INCLUDES ILSM THROUGHOUT ALL PROJECT AREAS WHERE CEILINGS WILL BE REMOVED TO ACCOMMODATE THE INSTALLATION OF THE NEW CHILLED WATER SYSTEM. ILSM WILL BE RESTORED TO NORMAL UPON COMPLETION OF CONSTRUCTION ACTIVITIES. ILSM INCLUDE, BUT ARE NOT LIMITED TO:

1. AT LEAST 50-PERCENT OF THE REQUIRED MEANS OF EGRESS WILL BE MAINTAINED; UNIMPEDED AND UNOBSTRUCTED THROUGHOUT CONSTRUCTION. EXIT ACCESS ROUTES WILL BE CLEARLY IDENTIFIED AND PROVIDED WITH EMERGENCY LIGHTING.
2. MODIFICATIONS TO THE EXISTING FIRE ALARM SYSTEM ARE ANTICIPATED BASED UPON THE SCOPE OF WORK; NOTIFICATION APPLIANCE WILL BE MAINTAINED AND AUTOMATIC SMOKE DETECTORS WILL BE REPLACED WITH HEAT DETECTORS DURING CONSTRUCTION.
3. PORTABLE FIRE EXTINGUISHERS WILL BE MAINTAINED.

## B-1 HOSPITAL (C.1949; NO MAJOR RENOVATIONS)

**INTERNATIONAL BUILDING CODE (IBC) - CODE SUMMARY**

- OCCUPANCY CLASSIFICATION: MIXED SEPARATED OCCUPANCY GROUP B AND GROUP I-2
- CONSTRUCTION TYPE: TYPE IB CONSTRUCTION

| FIRE RESISTANCE RATING REQUIREMENTS FOR TYPE IB CONSTRUCTION BASED UPON FIRE SEPARATION DISTANCE* (IBC, TABLE 601) | |
|---|---|
| STRUCTURAL FRAME | 2 HOURS |
| EXTERIOR BEARING WALLS | 2 HOURS |
| INTERIOR BEARING WALLS | 2 HOURS |
| EXTERIOR NONBEARING WALLS AND PARTITIONS (IBC TABLE 705.5) | 1 HOURS |
| INTERIOR NONBEARING WALLS AND PARTITIONS | 0 HOURS |
| FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS) | 2 HOURS |
| ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS) | 1 HOURS |
| EXTERIOR EXPOSURE PROTECTION (IBC TABLE 705.5) | 1 HOURS |

* FIRE RESISTANCE RATING REQUIREMENTS FOR OTHER APPLICABLE CODES ARE ADDRESSED ELSEWHERE.

| ALLOWABLE BUILDING AREA, NUMBER OF STORIES, HEIGHT | | |
|---|---|---|
| CONSTRUCTION TYPE | TYPE IB | |
| OCCUPANCY CLASSIFICATION | MIXED SEPERATED GROUP B AND GROUP I-2 | |
| FIRE SEPARATION DISTANCE | 0 FT | |
| **REQUIRED BUILDING ELEMENT** | **ALLOWABLE** | **PROVIDED** |
| BUILDING HEIGHT ABOVE GRADE (IBC, TABLE 504.3) | 180 FT | 109 FT |
| NUMBER OF STORIES ABOVE GRADE (TABLE 504.4) | 12 STORIES (B)<br>5 STORIES (I-2) | 5 STORIES (B) **<br>2 STORIES (I-2) |
| BUILDING AREA (TABLE 506.2) | UNLIMITED (B) ***<br>UNLIMITED (I-2) | 159, 609 SF (B) ***<br>42,511 SF (I-2) |
| BUILDING AREA WITH FRONTAGE INCREASE (IBC, EQUATION 5-1) | | |
| MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE (IBC, TABLE 705.8) | NOT PERMITTED | NOT PROVIDED |

** THIS IS A HIGHRISE BLDG.; THE 7TH FL IS GREATER THAN 75FT ABOVE GRADE (NFPA 101, 3.3.37.7)
*** SEE OCCUPANCY SQUARE FOOTAGE SUMMARY ON THIS SHEET FOR INDIDIVIDUAL FLOOR COMPLIANCE.

## Occupancy Square Footage Summary

| BLDG. | Floor/Level | HEALTHCARE | AMBULATORY | BUSINESS | *INDUSTRIAL | | SUB-TOTALS | BLDG. |
|---|---|---|---|---|---|---|---|---|
| B1 | SB | | | | 8,943 | | 8,943 | B1 |
| B1 | B | | | 30,050 | | | 30,050 | B1 |
| B1 | 1 | | | 27,960 | | | 27,960 | B1 |
| B1 | M (MEZZ.) | | | 1,285 | | | 1,285 | B1 |
| B1 | 2 | | 18,128 | 8,983 | | | 27,111 | B1 |
| B1 | 3 | | 24,383 | | | | 24,383 | B1 |
| B1 | 4 | | | 24,563 | | | 24,563 | B1 |
| B1 | 5 | 24,482 | | | | | 24,482 | B1 |
| B1 | 6 | 15,854 | | | | | 15,854 | B1 |
| B1 | 7 | | | 15,493 | | | 15,493 | B1 |
| B1 | P (MECH) | | | | 1,996 | | 1,996 | B1 |
| | TOTALS | 40,336 | 42,511 | 108,314 | 10,939 | | 202,120 | TOTALS |

*** SPECIAL PURPOSE INDUSTRIAL OCCUPANCY**

**NOTE: OCCUPANT LOAD PER SMOKE COMPARTMENT WAS CALCULATED IN A PREVIOUS DESIGN COMPELTED BY THE MIHALIK GROUP. THIS IS TABLE IS INCLUDED FOR REFERENCE ONLY AS A FULL LIFE SAFETY ANALYSIS IS NOT PART OF THE SCOPE OF WORK FOR THIS PROJECT.**

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER
JOHN VET FRIESEN
No. 33020
Exp. 6/30/26
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: GENERAL NOTES AND ABBREVIATIONS

Approved: Approver

Phase: BID SET

-

Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE

Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026 | Checked: JVV | Drawn: CHP

Project Number: 570-20-308

Building Number:

Drawing Number: GI001

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt
5/4/2026 12:19:18 PM
VA FORM 08 - 6231

**LIFE SAFETY CODE SUMMARY**

THE INTENT OF THE LIFE SAFETY CODE SUMMARY IS TO IDENTIFY THE FOLLOWING: CLASSIFICATION OF OCCUPANCY, OCCUPANT LOAD FACTOR(S) AND TOTAL CALCULATED LOAD, REQUIRED VERSUS PROVIDED NUMBER OF EXITS,CAPACITY OF MEANS OF EGRESS, ARRANGEMENT OF MEANS OF EGRESS INCLUDING REMOTENESS OF EXITS, HORIZONTAL, TRAVEL DISTANCE, COMMON PATH OF TRAVEL, DEAD-END CORRIDORS LENGTHS, DISCHARGE FROM EXITS,FIRE RATED SEPARATION OF EXITS AND EXIT ACCESS, FIRE RATED SEPARATION OF HAZARDOUS AREAS AND FLAME SPREAD / SMOKE DEVELOPMENT RATINGS OF INTERIOR FINISHES.

**OCCUPANCY CLASSIFICATION** (NFPA 101 - 2024 EDITION CHAPTERS 19, 21, 39, AND 40 RESPECTIVELY)

- HEALTH CARE
- AMBULATORY HEALTH CARE
- BUSINESS OCCUPANCY
- SPECIAL-PURPOSE INDUSTRIAL OCCUPANCY

EACH PORTION OF THE BUILDING SHALL BE CLASSIFIED AS TO ITS USE. (6.1.14.3.1) THE MEANS OF EGRESS FACILITIES, CONSTRUCTION TYPE, PROTECTION, AND OTHER SAFEGUARDS IN THE BUILDING SHALL COMPLY WITH THE MOST RESTRICTIVE FIRE AND LIFE SAFETY REQUIREMENTS OF THE OCCUPANCIES INVOLVED. (6.1.14.3.2)

**CLASSIFICATION OF HAZARD OF CONTENTS**

ORDINARY HAZARD CONTENTS (NFPA 101, 38.1.5)

**FIRESTOP SYSTEMS**

ALL PENETRATIONS OF FIRE RESISTIVE CONSTRUCTION WILL BE PROVIDED WITH UL-LISTED FIRESTOP SYSTEMS.

**PORTABLE FIRE EXTINGUISHERS AND CABINETS**

GENERAL PURPOSE PORTABLE EXTINGUISHERS AND CABINETS WILL BE PROVIDED THROUGHOUT THE FACILITY PER UFC 3-600-01 AND NFPA 10.

| | |
|---|---|
| MAXIMUM HEIGHT TO TOP OF EXTINGUISHER: | 5 FT (NFPA 10, 6.1.3.8.1) |
| MINIMUM CLEARANCE TO BOTTOM OF EXTINGUISHER: | 4 IN (NFPA 10, 6.1.3.8.3) |
| MAXIMUM TRAVEL DISTANCE: | 75 FT (NFPA 10, TABLE 6.2.1.1) |

THE MINIMUM PORTABLE FIRE EXTINGUISHER RATING SHALL BE CLASS A:10B:C (10 LB.).

THE FACILITY IS PROVIDED WITH EXISTING FIRE EXTINGUISHERS ON WALL HOOKS. THE FIRE EXTINGUISHERS WILL BE PROTECTED IN PLACE DURING THE CONSTRUCTION. FIRE EXTINGUISHERS IN CABINETS WILL BE ADDED TO MEET 75 FT OF TRAVEL LENGTH.

SEMI-RECESSED CABINETS WILL BE PROVIDED IN NEW BUILDING ADITION.
SURFACE-MOUNTED CABINETS WILL BE PROVIDED IN EXISTING BUILDING.

**ARRANGEMENT OF MEANS OF EGRESS** (NFPA 101, 7.5.1.3.2)

WHERE TWO EXITS, EXIT ACCESSES, OR EXIT DISCHARGES ARE REQUIRED, THEY SHALL BE LOCATED AT A DISTANCE FROM ONE ANOTHER NOT LESS ONE-THIRD THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE BUILDING OR AREA TO BE SERVED. (7.5.1.3.3)

**COMMON PATH, DEAD-END, AND TRAVEL DISTANCE LIMITS** (NFPA 101, TABLE A.7.6)

COMON PATH OF TRAVEL LIMIT MUST NOT EXCEED DISTANCE GREATER THAN 100FT.
TRAVEL DISTANCE MUST NOT EXCEED DISTANCE GREATER THAN 300 FT.
FIRE EXTINGUISHER TRAVEL DISTANCE MUST NOT EXCEED DISTANCE GREAT THAN 75 FT.

**REQUIRED NUMBER OF MEANS OF EGRESS** (NFPA 101 38.2.4)

EXITS SHALL COMPLY WITH THE FOLLOWING:

1. OCCUPANT LOAD MORE THAN 500 BUT NOT MORE THAN 1,000 - NOT LESS THAN THREE (NFPA 101, 7.4.1.2(1))
2. OCCUPANT LOAD MORE THAN 1,000 - NOT LESS THAN FOUR (NFPA 101, 7.4.1.2(2))
3. NOT LESS THAN TWO SEPARATE EXITS SHALL BE PROVIDED ON EVERY STORY, ACCESSIBLE FROM EVERY PART OF EVERY STORY. (NFPA 101, 38.2.4.1)
4. EXIT ACCESS, SHALL BE PERMITTED TO INCLUDE A SINGLE EXIT ACCESS PATH FOR THE DISTANCES PERMITTED AS COMMON PATH OF TRAVEL. (NFPA 101, 38.2.4.2)

**CAPACITY OF MEANS OF EGRESS**

CAPACITY FACTOR:

| | |
|---|---|
| STAIRS: | 0.30 IN./PERSON (NFPA 101, TABLE 7.3.3.1) |
| DOORWAYS, PASSAGEWAYS, RAMPS: | 0.20 IN./PERSON (NFPA 101, TABLE 7.3.3.1) |

THE WIDTH OF ANY MEANS OF EGRESS, EXCEPT FOR DOORS, SHALL NOT BE LESS THAN 36 IN. (7.3.4.1)

THE WIDTH OF ANY EXIT ACCESS CORRIDOR SERVING 50 OR MORE PERSONS SHALL BE NOT LESS THAN 44 IN. (NFPA 101 38.2.3.2)

**ILLUMINATION OF MEANS OF EGRESS**

ILLUMINATION MEANS OF EGRESS SHALL BE PROVIDED. (NFPA 101 38.2.88)

EXIT ACCESS SHALL INCLUDE ONLY DESIGNATED STAIRS, AISLES, AND CORRIDORS LEADING TO AN EXIT. EXIT DISCHARGE SHALL INCLUDE ONLY DESIGNATED STAIRS, AISLES, CORRIDORS, AND WALKWAYS LEADING TO A PUBLIC WAY. (NFPA 101, 7.8.1.1)

THE FLOORS AND OTHER WALKING SURFACES WITHIN A EXIT AND WITHIN THE PORTIONS OF THE EXIT ACCESS AND EXIT DISCHARGE SHALL BE ILLUMINATED AS FOLLOWS: (NFPA 101, 7.8.1.3)

1 FT-CANDLE FOR FLOORS
10 FT-CANDLE FOR STAIRS
0.2 FT-CANDLE DUE TO FAILURE OF ANY SINGLE LIGHTING UNIT

**EMERGENCY LIGHTING**

EMERGENCY LIGHTING MUST BE PROVIDED IN ACCORDANCE WITH NFPA 101, 7.9.

EMERGENCY ILLUMINATION MUST INCLUDE ALL REQUIRED MEANS OF EGRESS LIGHTING, ILLUMINATED EXIT SIGNS AND ALL OTHER LIGHTS SPECIFIED AS NECESSARY TO PROVIDE REQUIRED ILLUMINATION. EMERGENCY LIGHTING SYSTEMS SHALL BE DESIGNED AND INSTALLED SO THAT THE FAILURE OF ANY INDIVIDUAL LIGHTING ELEMENT, SUCH AS THE BURNING OUT OF A LAMP, CANNOT LEAVE IN TOTAL DARKNESS ANY SPACE THAT REQUIRES EMERGENCY ILLUMINATED. (NFPA 70, 2011 EDITION SECTION 700.16)

EMERGENCY ILLUMINATION OF MEANS OF EGRESS MUST BE PROVIDED. EXIT ACCESS SHALL INCLUDE ONLY DESIGNATED STAIRS, AISLES, AND CORRIDORS LEADING TO AN EXIT. EXIT DISCHARGE SHALL INCLUDE ONLY DESIGNATED STAIRS, AISLES, CORRIDORS, AND WALKWAYS LEADING TO A PUBLIC WAY. (NFPA 101, 7.9.1.2)

EMERGENCY ILLUMINATION MUST BE PROVIDED FOR A MINIMUM OF 1.5 HOURS IN THE EVENT OF FAILURE OF NORMAL LIGHTING. EMERGENCY LIGHTING FACILITIES SHALL BE ARRANGED TO PROVIDE INITIAL ILLUMINATION THAT IS NOT LESS THAN 0.1 FT-CANDLE, MEASURED ALONG THE PATH OF EGRESS AT FLOOR LEVEL. ILLUMINATION LEVELS SHALL BE PERMITTED TO DECLINE TO NOT LESS THAN AN AVERAGE OF 0.6-FT-CANDLE AND, AT ANY POINT, NOT LESS THAN 0.06 FT-CANDLE AT THE END OF 1.5 HOURS. A MAXIMUM-TO-MINIMUM ILLUMINATION UNIFORMITY RATIO OF 40 TO 1 SHALL NOT BE EXCEEDED. (NFPA 101, 7.9.2)

**FIRE / SMOKE RESISTIVE CONSTRUCTION REQUIREMENTS**

PROTECTION FROM HAZARDOUS AREAS SHALL BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING:

| HAZARDOUS AREAS WITHIN BUSINESS AND STORAGE AREAS | REQUIRED SEPARATION |
|---|---|
| ENGINE ROOM (GENERATOR ROOM) | 2 HOUR (NFPA 99) |
| ELEVATOR MACHINE ROOM | 2 HOUR AND SMOKE DETECTION |
| FIRE PUMP ROOM | 1 HOUR (NFPA 20) |
| ELECTRICAL DISTRIBUTION AND SWITCH GEARS | 1 HOUR |
| ELECTRICAL AND TELECOMMUNICATION CLOSETS | SMOKE PARTITION |
| BATTERY STORAGE ROOMS | 1 HOUR |
| INFORMATION TECHNOLOGY EQUIPMENT AND DATA CENTERS | 1 HOUR AND SMOKE DETECTION (NFPA 75) |
| STORAGE ROOMS (OTHER THAN GENERAL OFFICE SUPPLIES) | SMOKE PARTITION |
| STORAGE ROOMS (GREATER THAN 100 SF) | 1 HOUR |
| COMPACT MOBILE STORAGE (GREATER THAN 50 SF) | 1 HOUR AND SMOKE DETECTION (NFPA 99) |
| HIGH DENSITY STORAGE AND MEDICAL CAROUSEL STORAGE | 1 HOUR (VA FPDM) |
| MEDICAL GAS STORAGE | 2 HOUR (NFPA 99) |
| PHARMACY | 1 HOUR (VA FPDM) |
| LABORATORIES | 1 HOUR |
| LAUNDRY ROOMS (GREATER THAN 100 SF) | SMOKE PARTITION |
| WASTE AND LINEN COLLECTION ROOMS | 1 HOUR |
| MECHANICAL ROOMS | SMOKE PARTITION |
| MECHANICAL ROOMS (OPEN TO SHAFTS OR ADJACENT FLOORS) | 1 HOUR |
| SHAFTS (THREE STORIES OR LESS) | 1 HOUR |
| SHAFTS (FOUR STORIES OR MORE) | 2 HOUR |
| STAIR ENCLOSURE (THREE STORIES OR LESS) | 1 HOUR |
| STAIR ENCLOSURE (FOUR STORIES OR MORE) | 2 HOUR |
| ELEVATOR HOISTWAY | 2 HOUR |
| FLOOR CONSTRUCTION | 1 HOUR FIRE/SMOKE BARRIER |
| COMMUNICATING SPACES | 1 HOUR FIRE/SMOKE BARRIER |

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER
JOHN VELTRE
No. 33020
Exp. 6/30/26
FIRE PROTECTION
CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: GENERAL NOTES | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Building Number: |
| | | Issue Date: 05/04/2026 / Checked: JVV / Drawn: CHP | Drawing Number: GI002 |

VA FORM 08 - 6231

Autodesk Docs://220010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt
5/4/2026 12:19:19 PM

## SHEET KEYNOTES

## SHEET NOTES

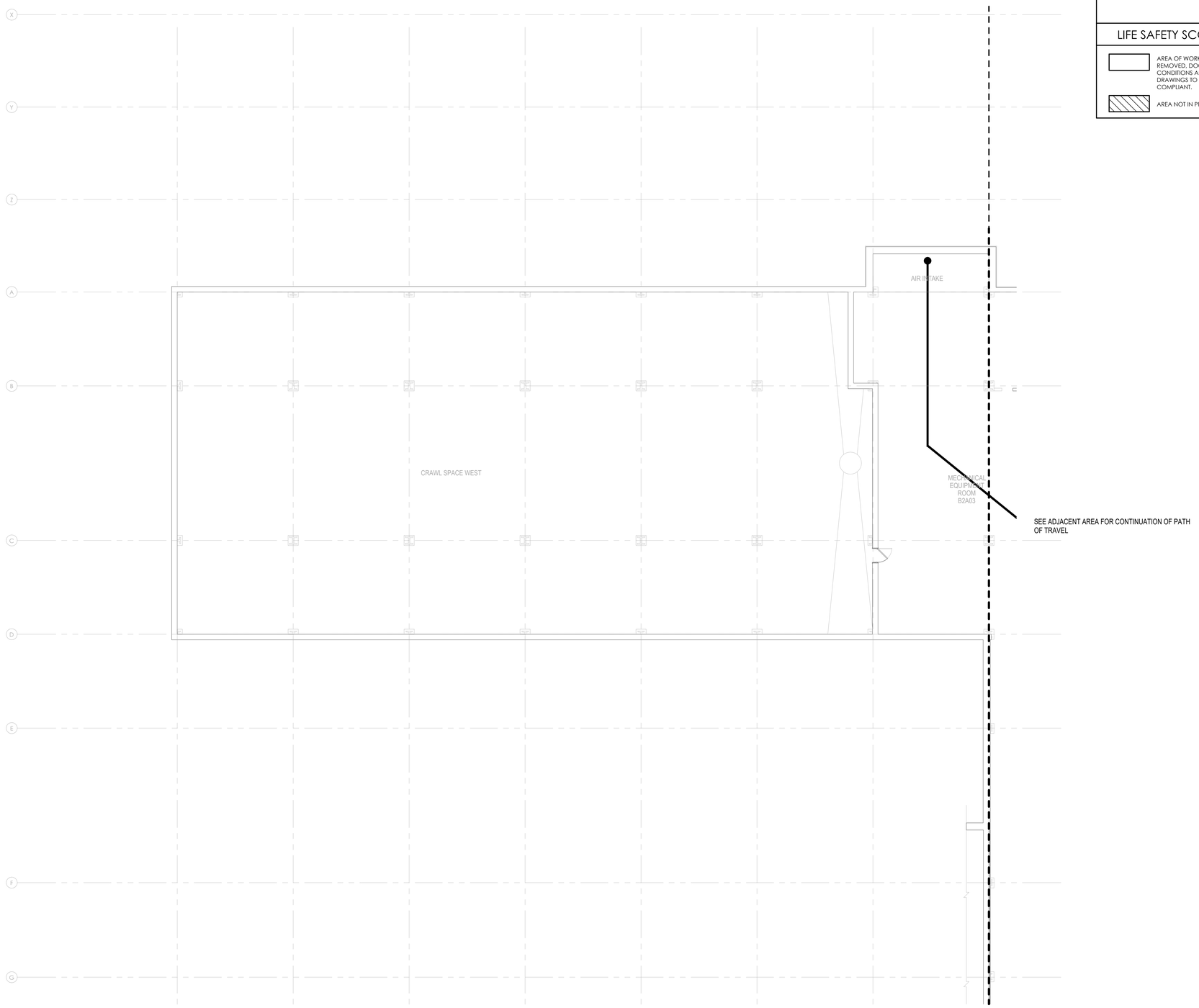
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| F | FIRE ALARM PULL STATION | Y | OCCUPANCY TYPE |
| | | Z | SQUARE FOOTAGE |




1 GI101A SUBBASEMENT PLAN LIFE SAFETY - AREA A
SCALE: 1/8" = 1'-0"

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER
JOHN VELTRE
No. 33020
Exp. 6/30/26
ELECTRICAL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: SUBBASEMENT PLAN LIFE SAFETY - AREA A | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Building Number: |
| | | Issue Date: 05/04/2026 / Checked: JVV / Drawn: CHP | Drawing Number: GI101A |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt
5/4/2026 12:19:20 PM

## # SHEET KEYNOTES

## SHEET NOTES

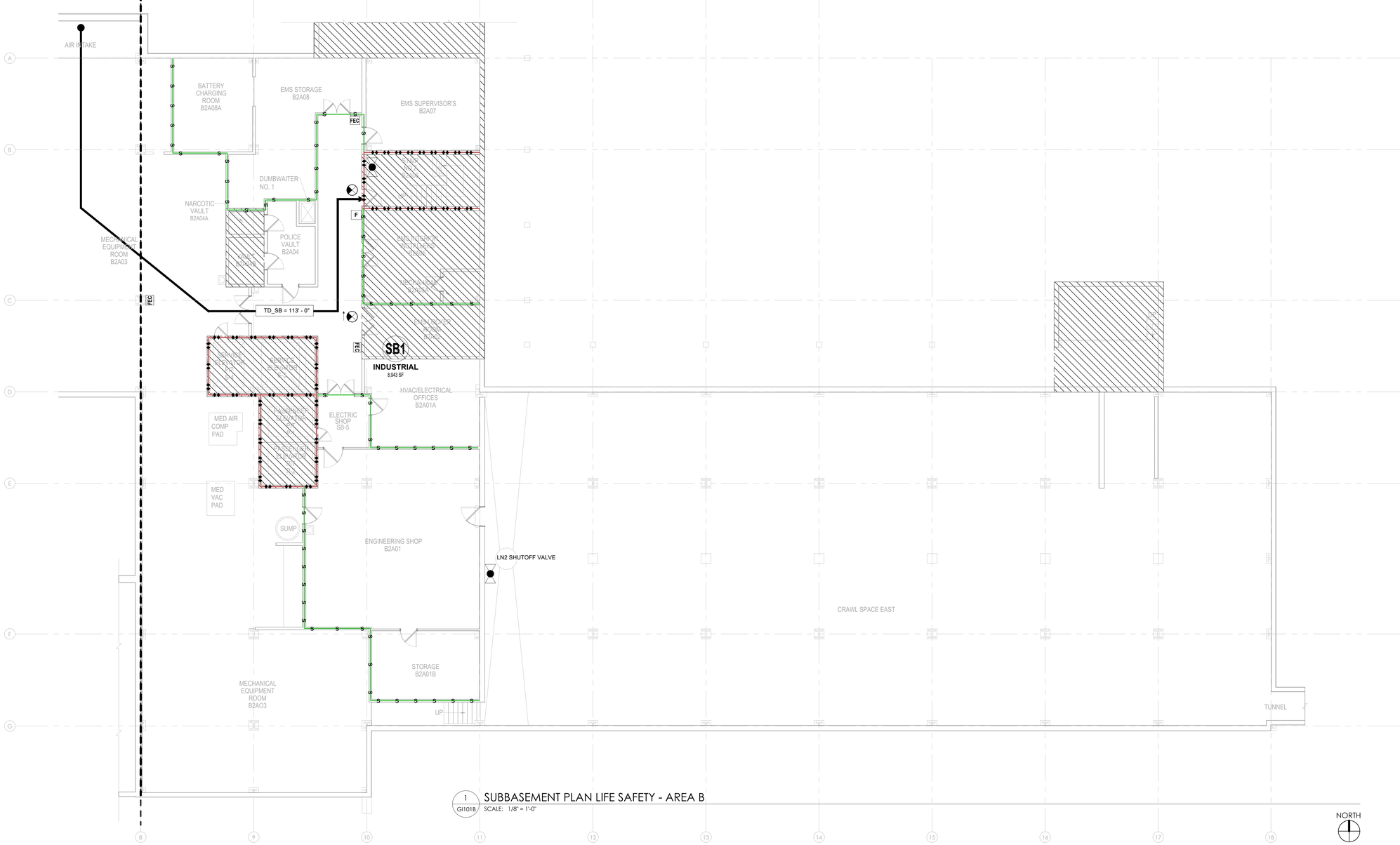
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | Y | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Z | SQUARE FOOTAGE |




1 GI101B SUBBASEMENT PLAN LIFE SAFETY - AREA B

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

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

## CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

## DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER JOHN VELTRE No. 33020 Exp. 6/30/27 FIRE PROTECTION ENGINEER

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: SUBBASEMENT PLAN LIFE SAFETY - AREA B | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Building Number: |
| | | Issue Date: 05/04/2026 · Checked: JVV · Drawn: CHP | Drawing Number: GI101B |

VA FORM 08 - 6231

Autodesk Docs://220310 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt 5/4/2026 12:19:21 PM

## # SHEET KEYNOTES

## SHEET NOTES

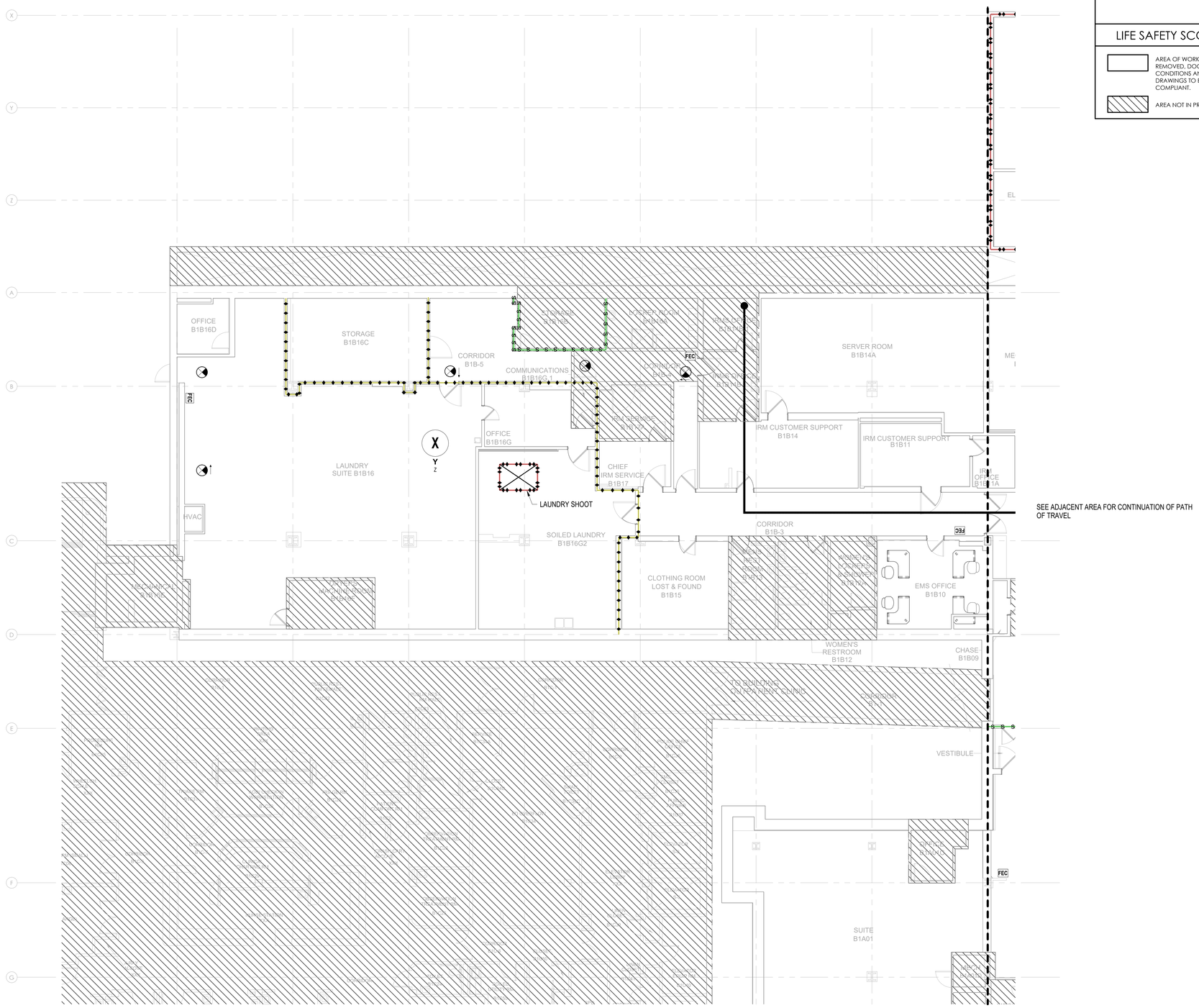
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X / Y / Z | SMOKE COMPARTMENT<br>OCCUPANCY TYPE<br>SQUARE FOOTAGE |
| F | FIRE ALARM PULL STATION | | |




1 GI102A BASEMENT PLAN LIFE SAFETY - AREA A
SCALE: 1/8" = 1'-0"

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

REGISTERED PROFESSIONAL ENGINEER
JOHN VELTRE
No. 33020
Exp. 6/30/27
FIRE PROTECTION
STATE OF CALIFORNIA

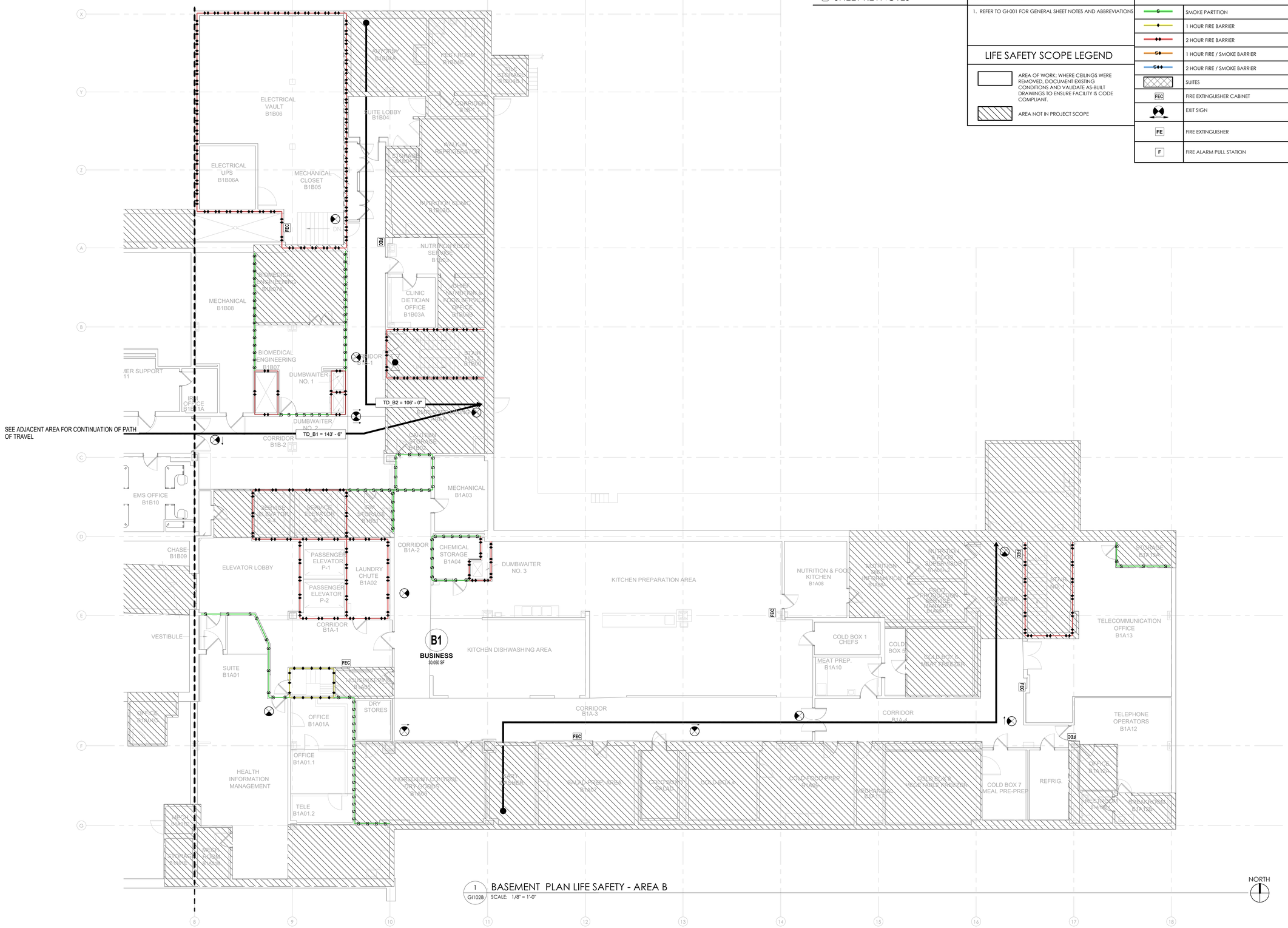
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: BASEMENT PLAN LIFE SAFETY - AREA A | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Building Number: |
| | | Issue Date: 05/04/2026 · Checked: JVV · Drawn: CHP | Drawing Number: GI102A |

VA FORM 08 - 6231

Autodesk Docs://220210 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt
5/4/2026 12:19:23 PM




1 GI102B BASEMENT PLAN LIFE SAFETY - AREA B

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

NORTH

## SHEET KEYNOTES

## SHEET NOTES

1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

- AREA OF WORK: WHERE CEILINGS WERE REMOVED. DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT.
- AREA NOT IN PROJECT SCOPE

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| 1 | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| 2 | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S1 | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S2 | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | Y | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Z | SQUARE FOOTAGE |

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER JOHN VELTRE No. 33020 Exp. 6/30/22 MECHANICAL ELECTRICAL

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BASEMENT PLAN LIFE SAFETY - AREA B

Approved: Approver

Phase: BID SET

-

Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE

Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026

Checked: JVV

Drawn: CHP

Project Number: 570-20-308

Building Number:

Drawing Number: GI102B

VA FORM 08 - 6231

Autodesk Docs://220210 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt

5/4/2026 12:19:25 PM

## # SHEET KEYNOTES

## SHEET NOTES

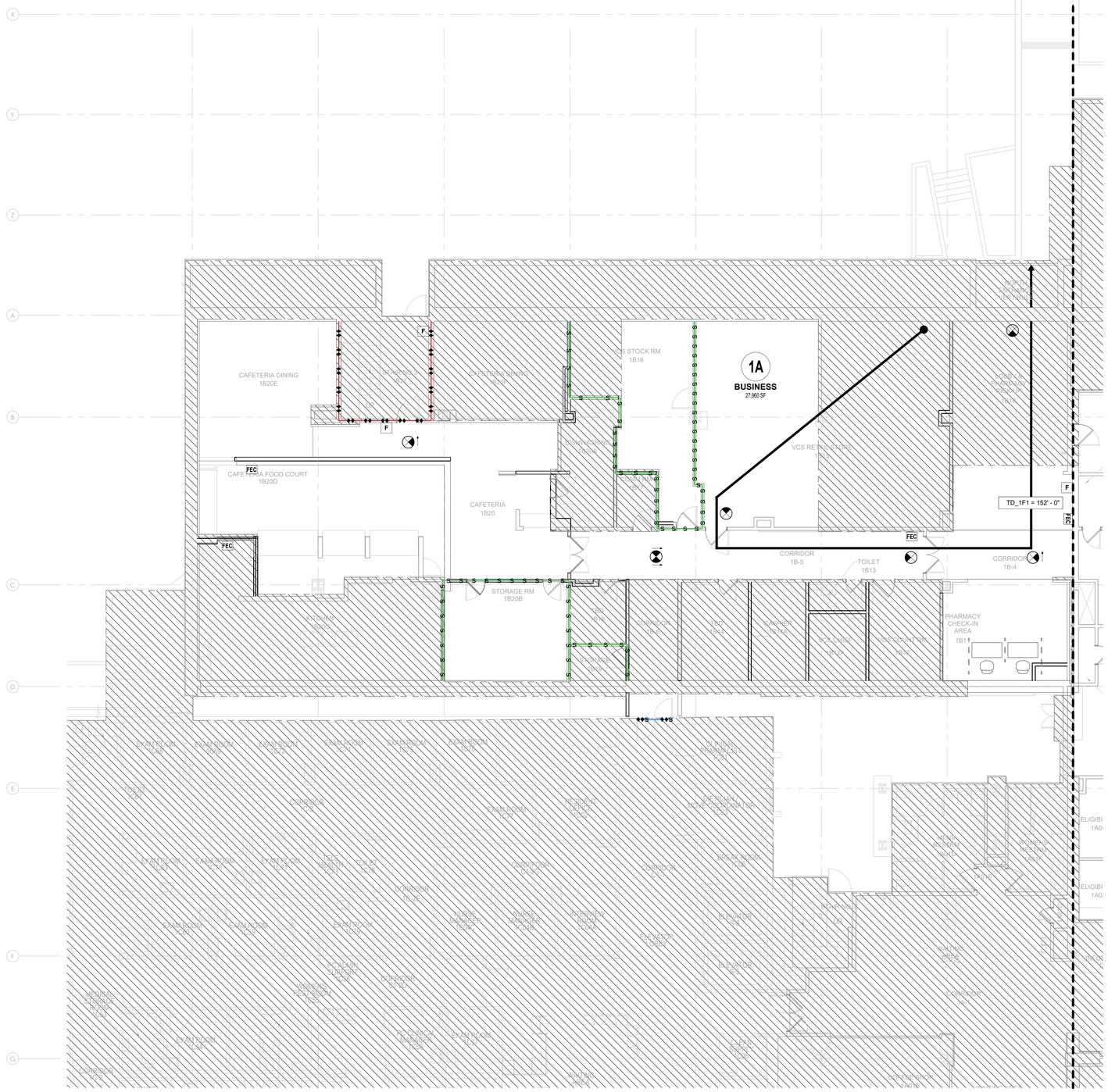
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Y / Z | SQUARE FOOTAGE |




1 GI103A 1ST FLOOR PLAN LIFE SAFETY - AREA A

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

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER
JOHN VELTRE
No. 33020
Exp. 6/30/26
FIRE PROTECTION ENGINEERING
STATE OF CALIFORNIA

Office of Construction and Facilities Management

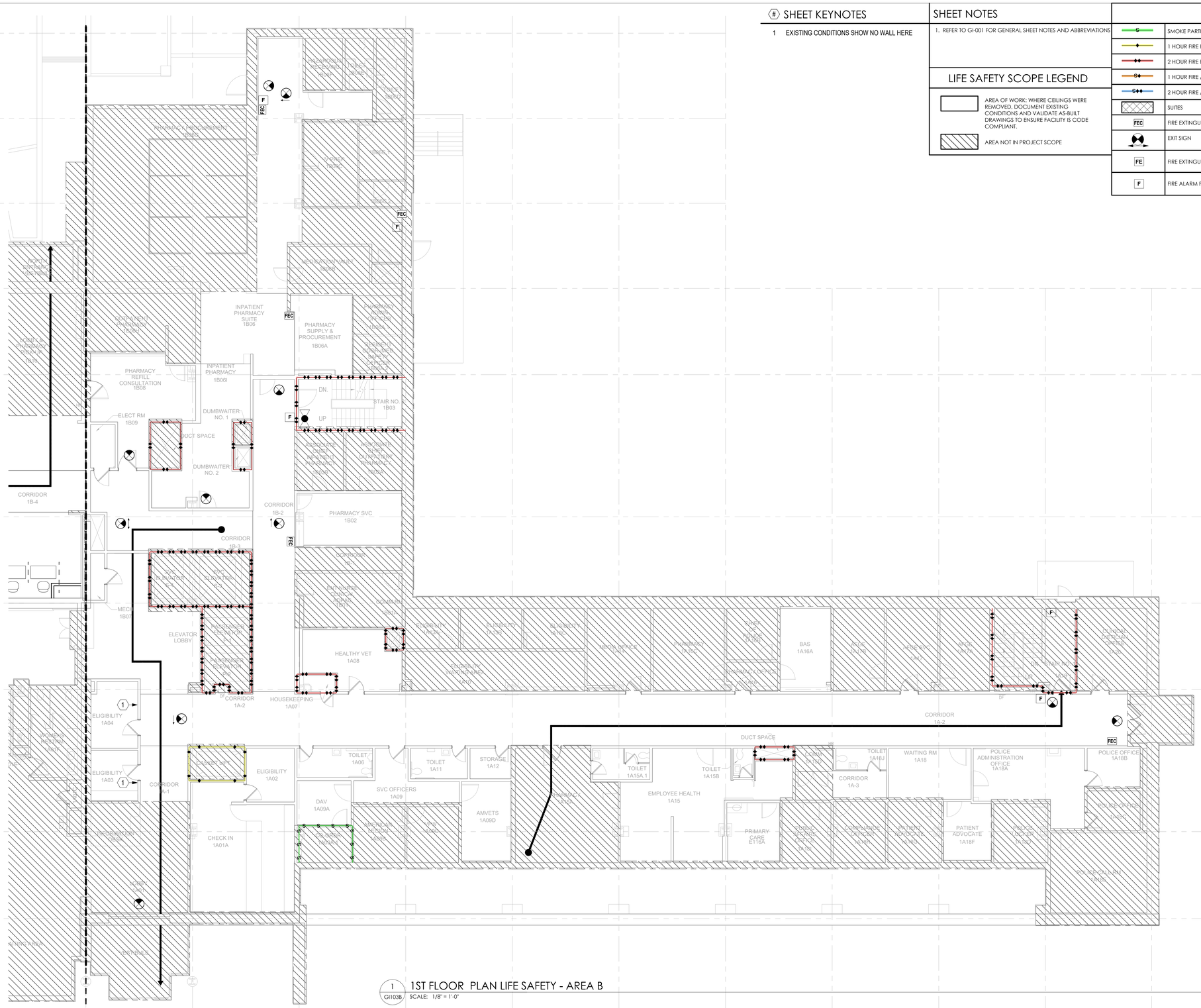
VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: FIRST FLOOR PLAN LIFE SAFETY - AREA A | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| | | | Building Number: |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Drawing Number: GI103A |
| | | Issue Date: 05/04/2026 · Checked: JVV · Drawn: CHP | |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt

5/4/2026 12:19:27 PM




1 GI103B 1ST FLOOR PLAN LIFE SAFETY - AREA B

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

NORTH

## # SHEET KEYNOTES

1 EXISTING CONDITIONS SHOW NO WALL HERE

## SHEET NOTES

1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

- AREA OF WORK: WHERE CEILINGS WERE REMOVED. DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT.
- AREA NOT IN PROJECT SCOPE

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| 1 | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| 2 | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S1 | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S2 | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | Y | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Z | SQUARE FOOTAGE |

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER
JOHN VET TRO
No. 33020
Exp. 6/30/26
MECHANICAL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: FIRST FLOOR PLAN LIFE SAFETY - AREA B | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Building Number: |
| | | Issue Date: 05/04/2026; Checked: JVV; Drawn: CHP | Drawing Number: GI103B |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt

5/4/2026 12:19:29 PM

## # SHEET KEYNOTES

## SHEET NOTES

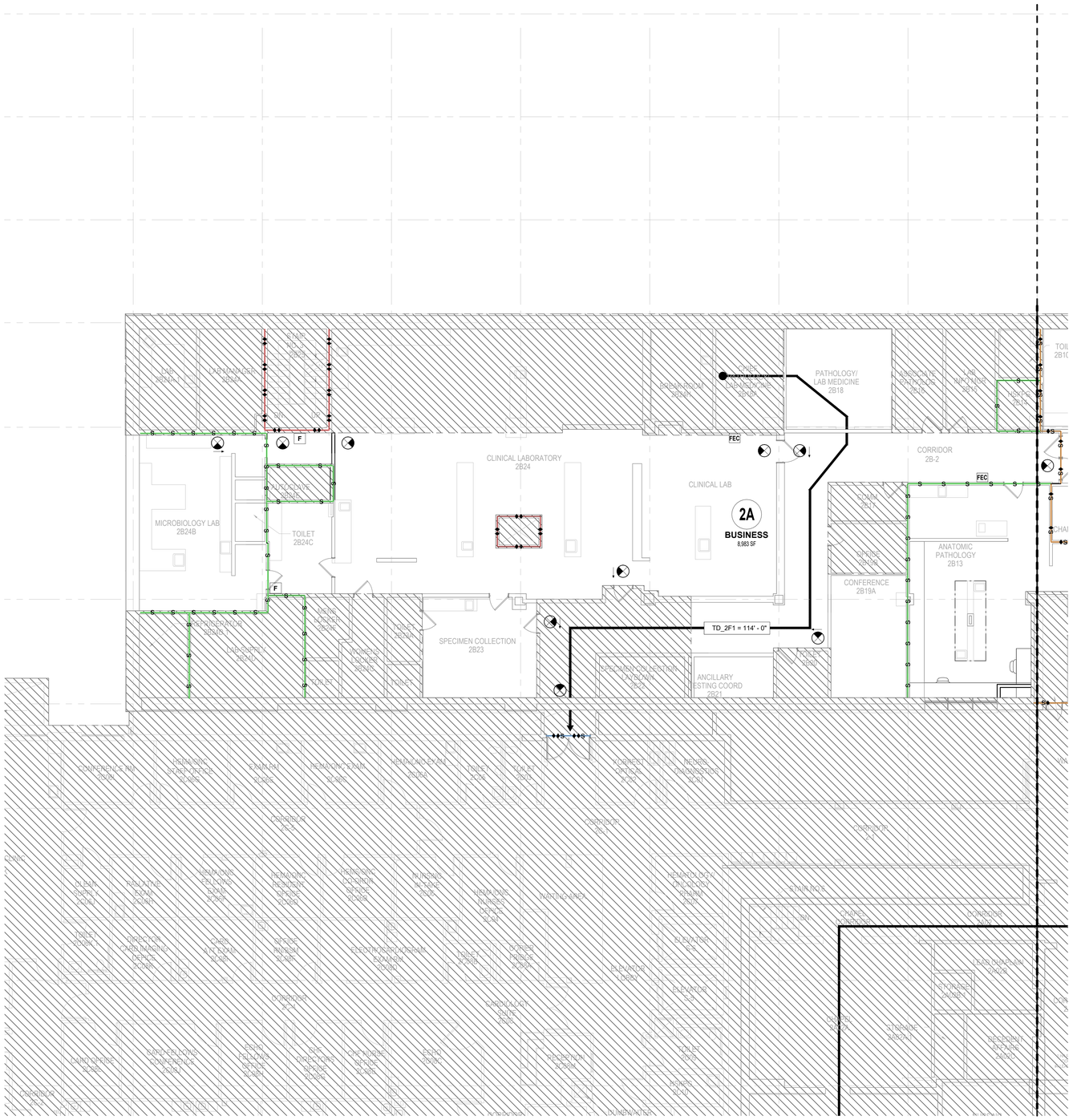
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED. DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Y / Z | SQUARE FOOTAGE |




1 GI104A 2ND FLOOR PLAN LIFE SAFETY - AREA A
SCALE: 1/8" = 1'-0"

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

REGISTERED PROFESSIONAL ENGINEER
JOHN VET FRIES
No. 33020
Exp. 6/30/26
MECHANICAL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: SECOND FLOOR PLAN LIFE SAFETY - AREA A | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| | | | Building Number: |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Drawing Number: GI104A |
| | | Issue Date: 05/04/2026 · Checked: JVV · Drawn: CHP | |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt
5/4/2026 12:19:33 PM

## SHEET KEYNOTES

## SHEET NOTES

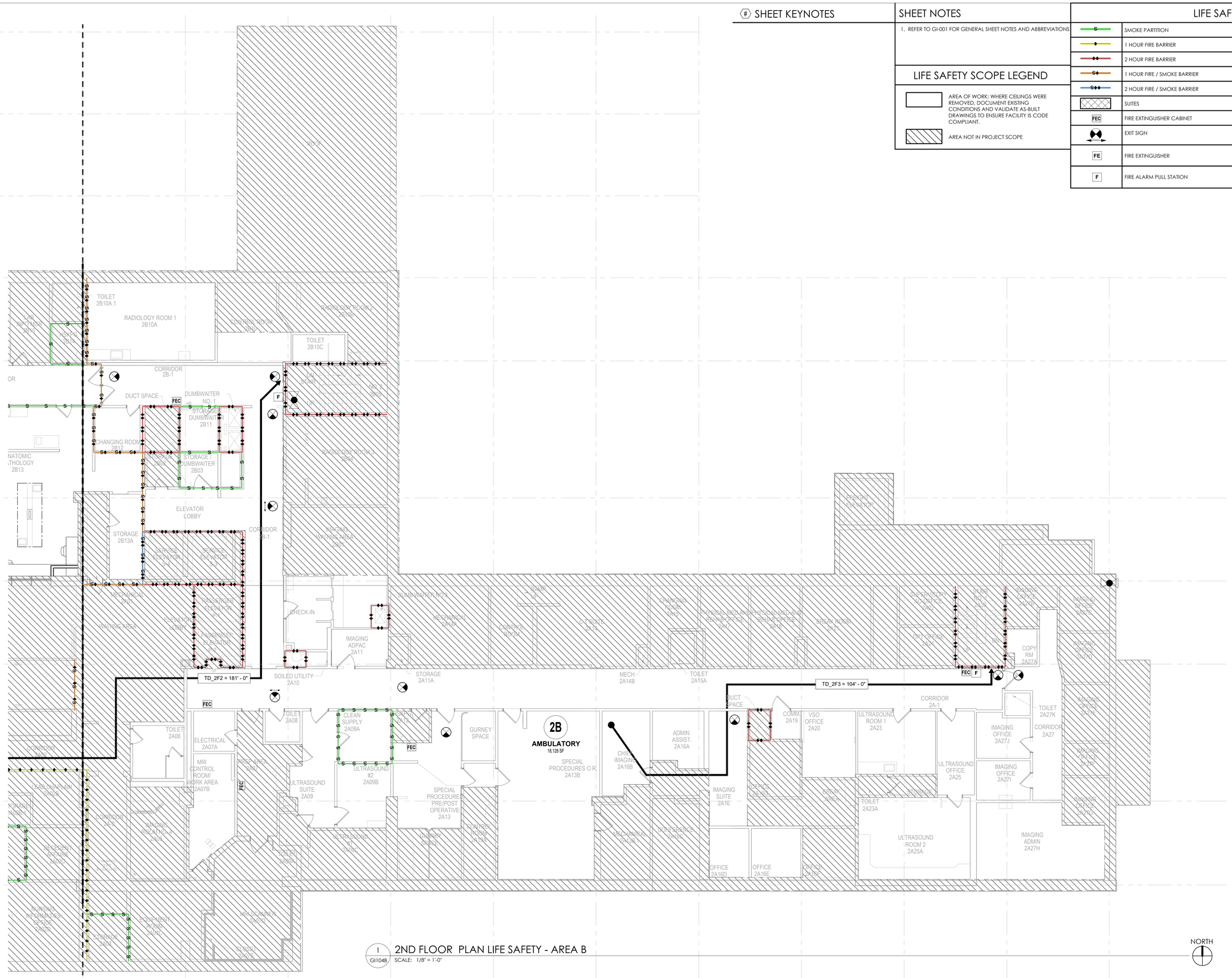
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

- AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT.
- AREA NOT IN PROJECT SCOPE

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Y Z | SQUARE FOOTAGE |




1 / GI104B 2ND FLOOR PLAN LIFE SAFETY - AREA B

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

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

REGISTERED PROFESSIONAL ENGINEER
JOHN VET. FRIAS
No. 33020
Exp. 6/30/26
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: SECOND FLOOR PLAN LIFE SAFETY - AREA B | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| Approved: Approver | - | Building Number: | |
| | | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Drawing Number: GI104B |
| | | Issue Date: 05/04/2026 · Checked: JVV · Drawn: CHP | |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt

5/4/2026 12:19:32 PM

## SHEET KEYNOTES

## SHEET NOTES

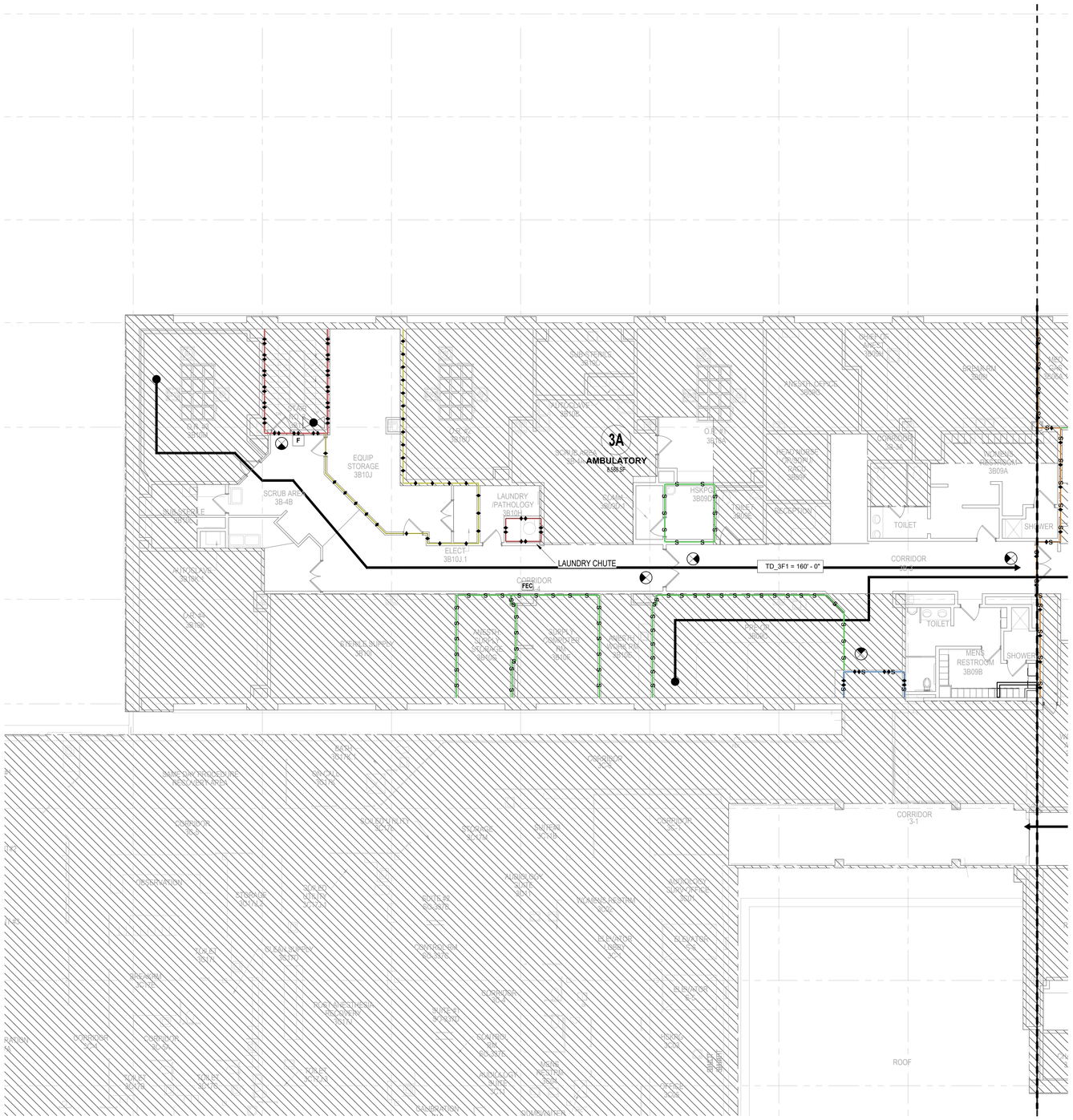
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED. DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | Y | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Z | SQUARE FOOTAGE |




1 GI105A 3RD FLOOR PLAN LIFE SAFETY - AREA A
SCALE: 1/8" = 1'-0"

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER JOHN VELTRE No. 33020 Exp. 6/30/22 FIRE PROTECTION ENGINEER

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: THIRD FLOOR PLAN LIFE SAFETY - AREA A | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| | | | Building Number: |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Drawing Number: GI105A |
| | | Issue Date: 05/04/2026 · Checked: JVV · Drawn: CHP | |

VA FORM 08 - 6231

Autodesk Docs://220010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt
5/4/2026 12:19:34 PM

## # SHEET KEYNOTES

## SHEET NOTES

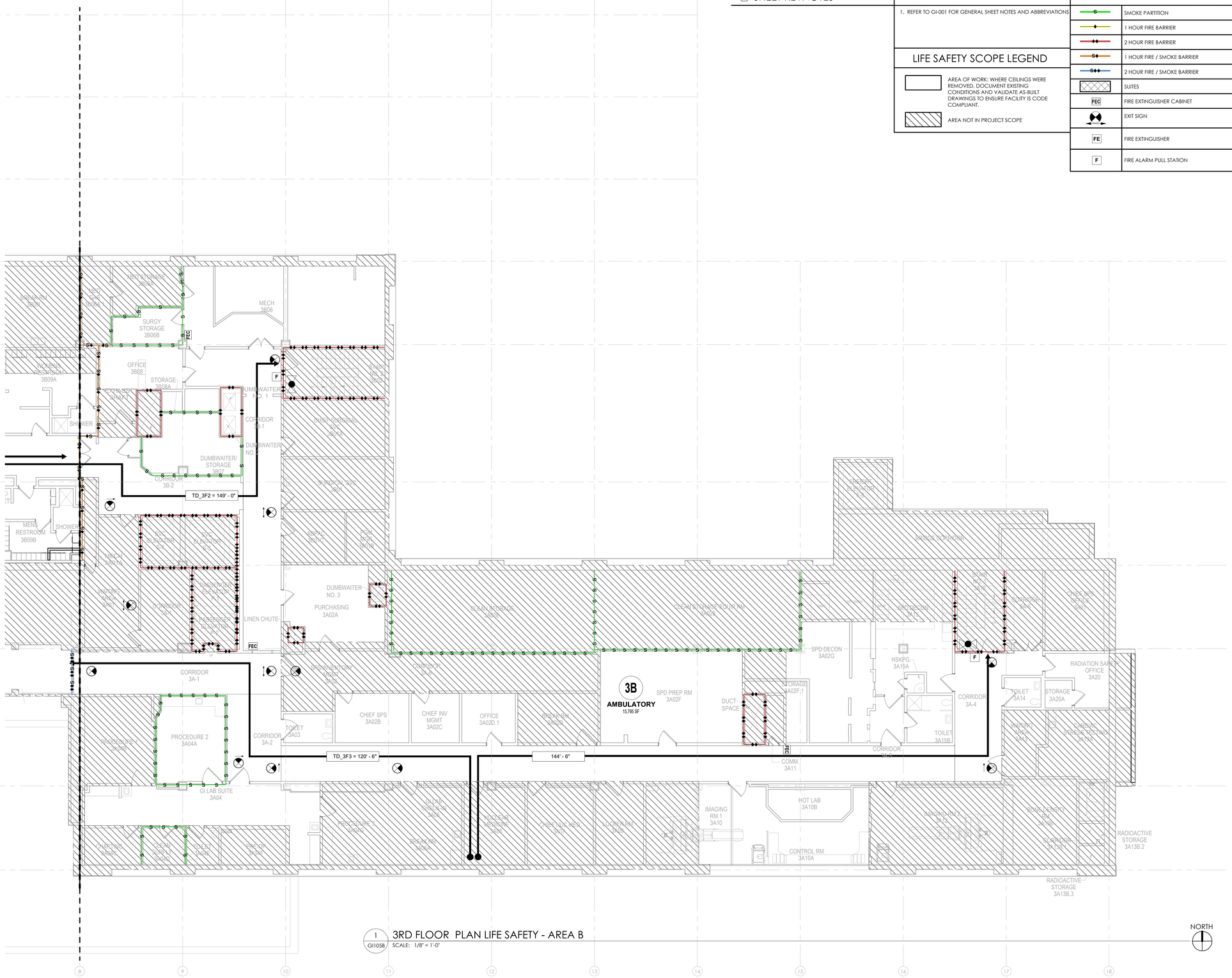
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Y / Z | SQUARE FOOTAGE |




1 GI105B 3RD FLOOR PLAN LIFE SAFETY - AREA B

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

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

REGISTERED PROFESSIONAL ENGINEER
JOHN VELTRE
No. 33020
Exp. 6/30/27
CONSTRUCTION MANAGEMENT
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: THIRD FLOOR PLAN LIFE SAFETY - AREA B | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Building Number: |
| | | Issue Date: 05/04/2026 / Checked: JVV / Drawn: CHP | Drawing Number: GI105B |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt

5/4/2026 12:19:36 PM

## SHEET KEYNOTES

## SHEET NOTES

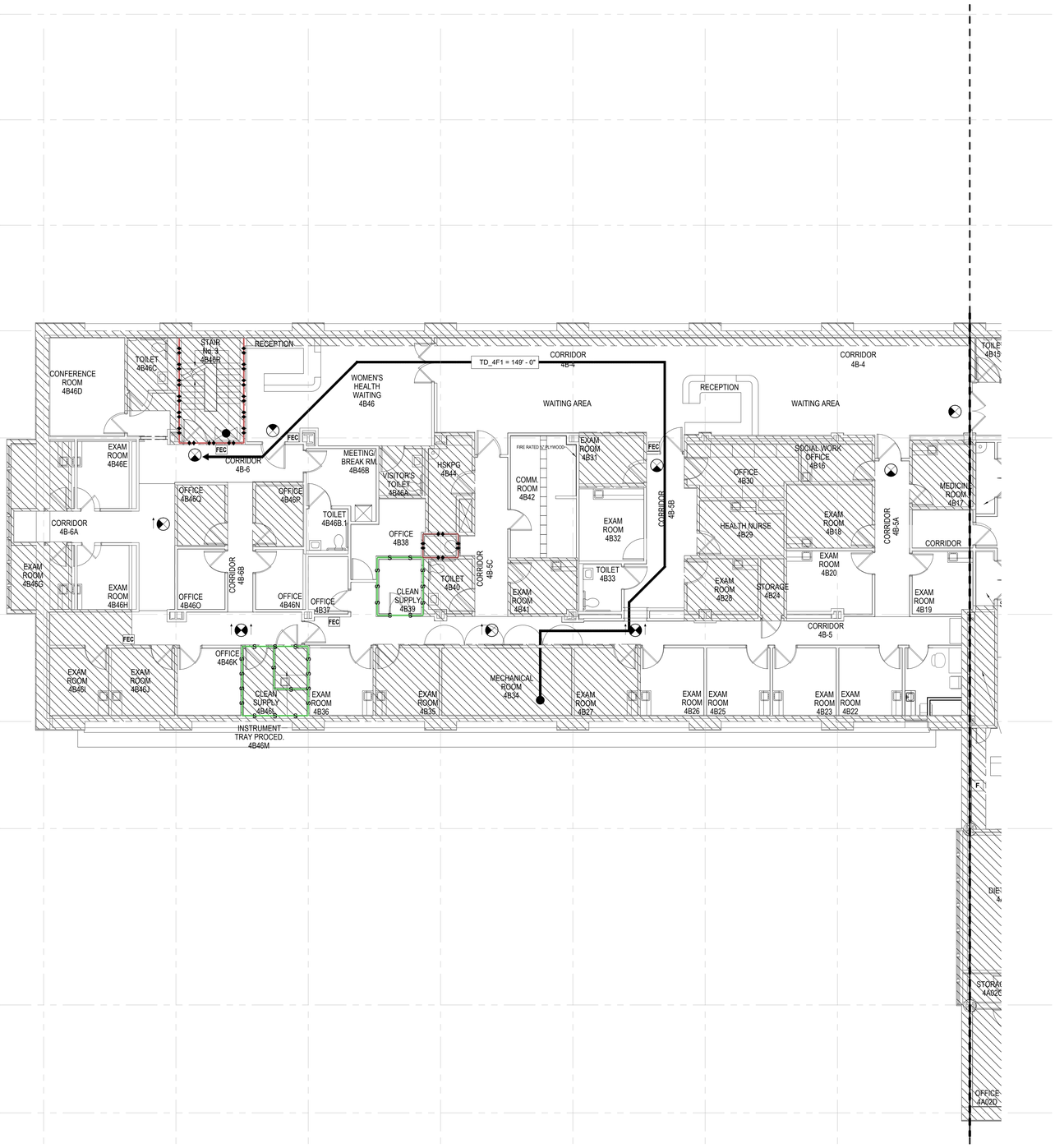
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED. DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | Y | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Z | SQUARE FOOTAGE |




1 GI106A 4TH FLOOR PLAN LIFE SAFETY - AREA A
SCALE: 1/8" = 1'-0"

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

REGISTERED PROFESSIONAL ENGINEER
JOHN VET PE
No. 33020
Exp. 6/30/26
MECHANICAL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: FOURTH FLOOR PLAN LIFE SAFETY - AREA A | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| | | | Building Number: |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Drawing Number: GI106A |
| | | Issue Date: 05/04/2026 · Checked: JVV · Drawn: CHP | |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt
5/4/2026 12:19:38 PM

## # SHEET KEYNOTES

## SHEET NOTES

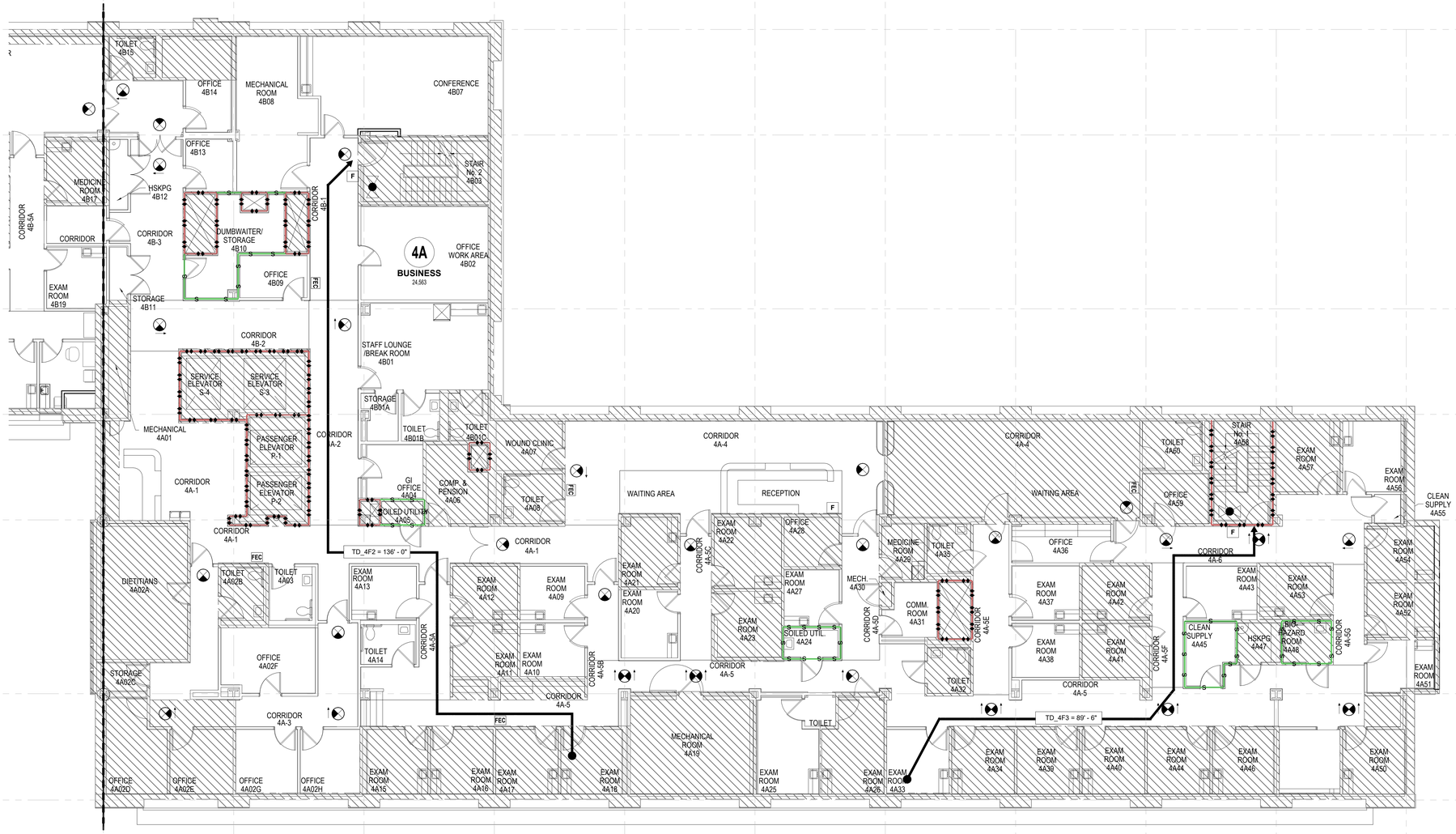
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Y Z | SQUARE FOOTAGE |




1 GI106B 4TH FLOOR PLAN LIFE SAFETY - AREA B

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

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

REGISTERED PROFESSIONAL ENGINEER
JOHN VETTRE
No. 33020
Exp. 6/30/26
CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: FOURTH FLOOR PLAN LIFE SAFETY - AREA B | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| | | | Building Number: |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Drawing Number: GI106B |
| | | Issue Date: 05/04/2026 · Checked: JVV · Drawn: CHP | |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt

5/4/2026 12:19:40 PM

## # SHEET KEYNOTES

## SHEET NOTES

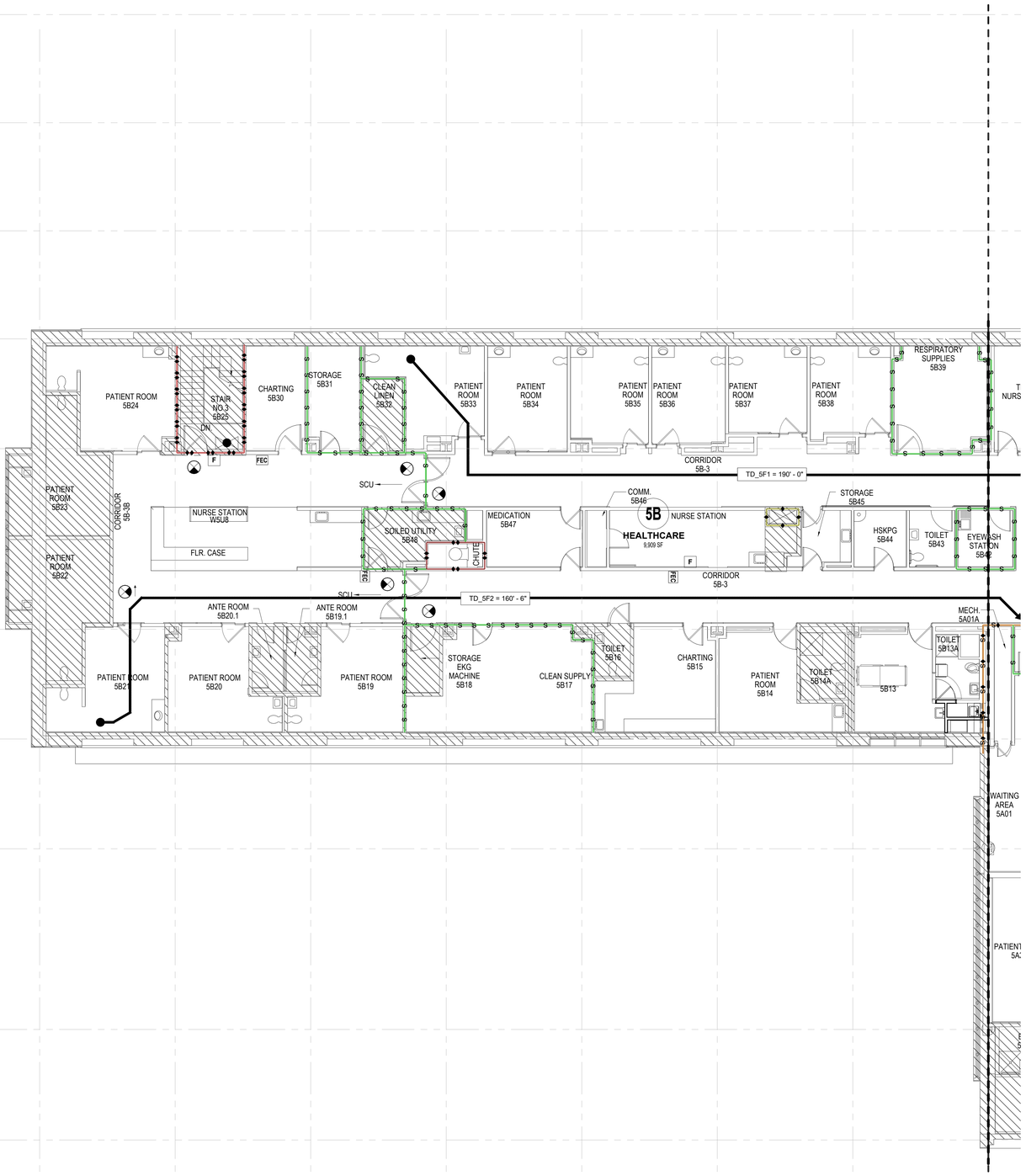
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | Y | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Z | SQUARE FOOTAGE |




1 GI107A 5TH FLOOR PLAN LIFE SAFETY - AREA A
SCALE: 1/8" = 1'-0"

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

## CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

## DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER
JOHN VELTRE
No. 33020
Exp. 6/30/27
CIVIL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: FIFTH FLOOR PLAN LIFE SAFETY - AREA A | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Building Number: |
| | | Issue Date: 05/04/2026 · Checked: JVV · Drawn: CHP | Drawing Number: GI107A |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt
5/4/2026 12:19:41 PM

## # SHEET KEYNOTES

## SHEET NOTES

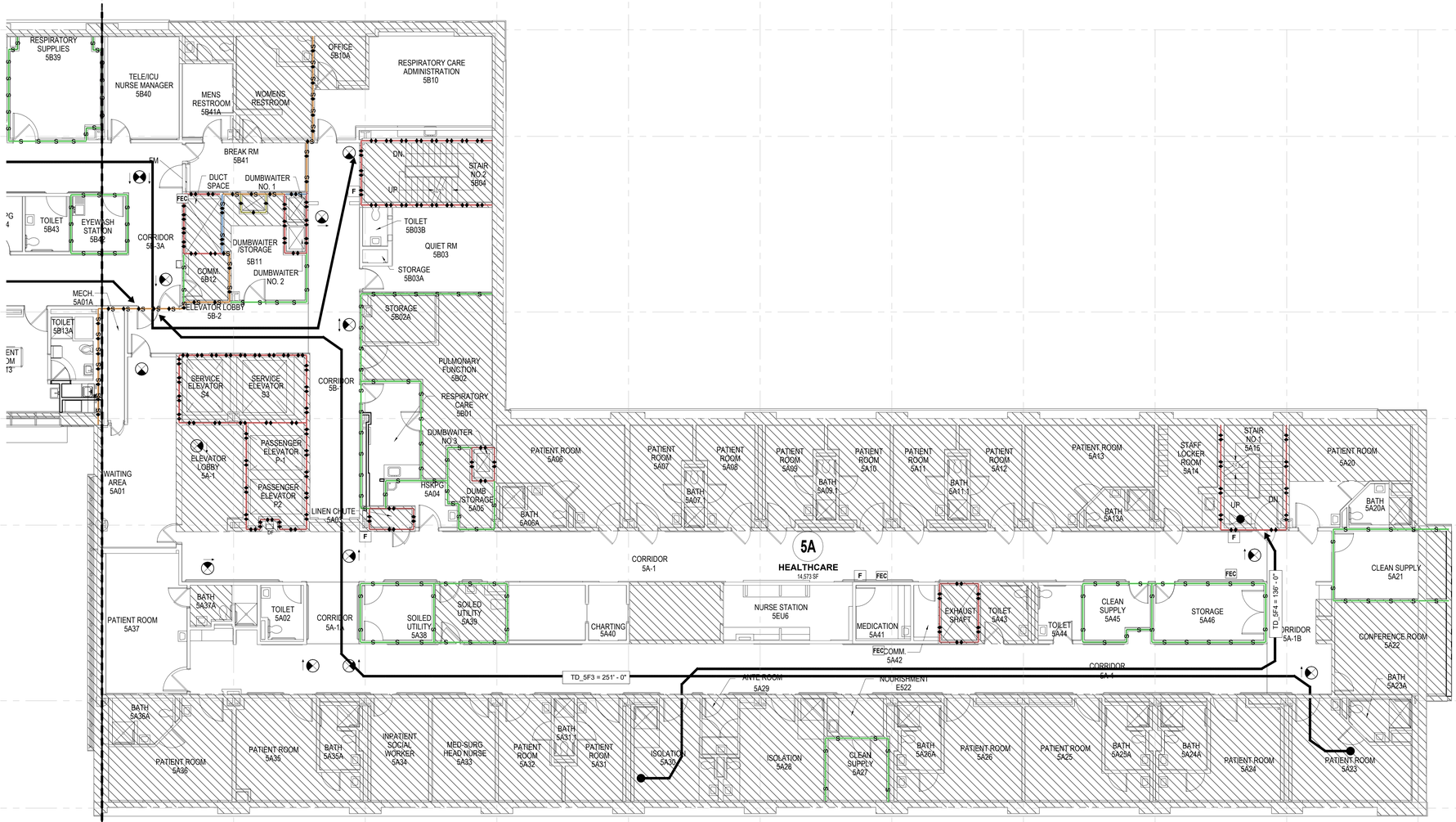
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Y / Z | SQUARE FOOTAGE |




1 GI107B 5TH FLOOR PLAN LIFE SAFETY - AREA B

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

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

## CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

## DESIGNER OF RECORD

**A/E:**
**DAVENERGY SOLUTIONS**
**2207 GARNET AVE, SUITE I**
**SAN DIEGO, CA 92109**
**619-770-8552**

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

REGISTERED PROFESSIONAL ENGINEER JOHN VETTRE No. 33020 Exp. 6/30/27 STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| **Drawing Title** FIFTH FLOOR PLAN LIFE SAFETY - AREA B | **Phase** BID SET | **Project Title** VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | **Project Number** 570-20-308 |
| **Approved:** Approver | - | **Location** FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | **Building Number** |
| | | **Issue Date** 05/04/2026 / **Checked** JVV / **Drawn** CHP | **Drawing Number** GI107B |

VA FORM 08 - 6231

Autodesk Docs://222010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt

5/4/2026 12:19:43 PM

## # SHEET KEYNOTES

## SHEET NOTES

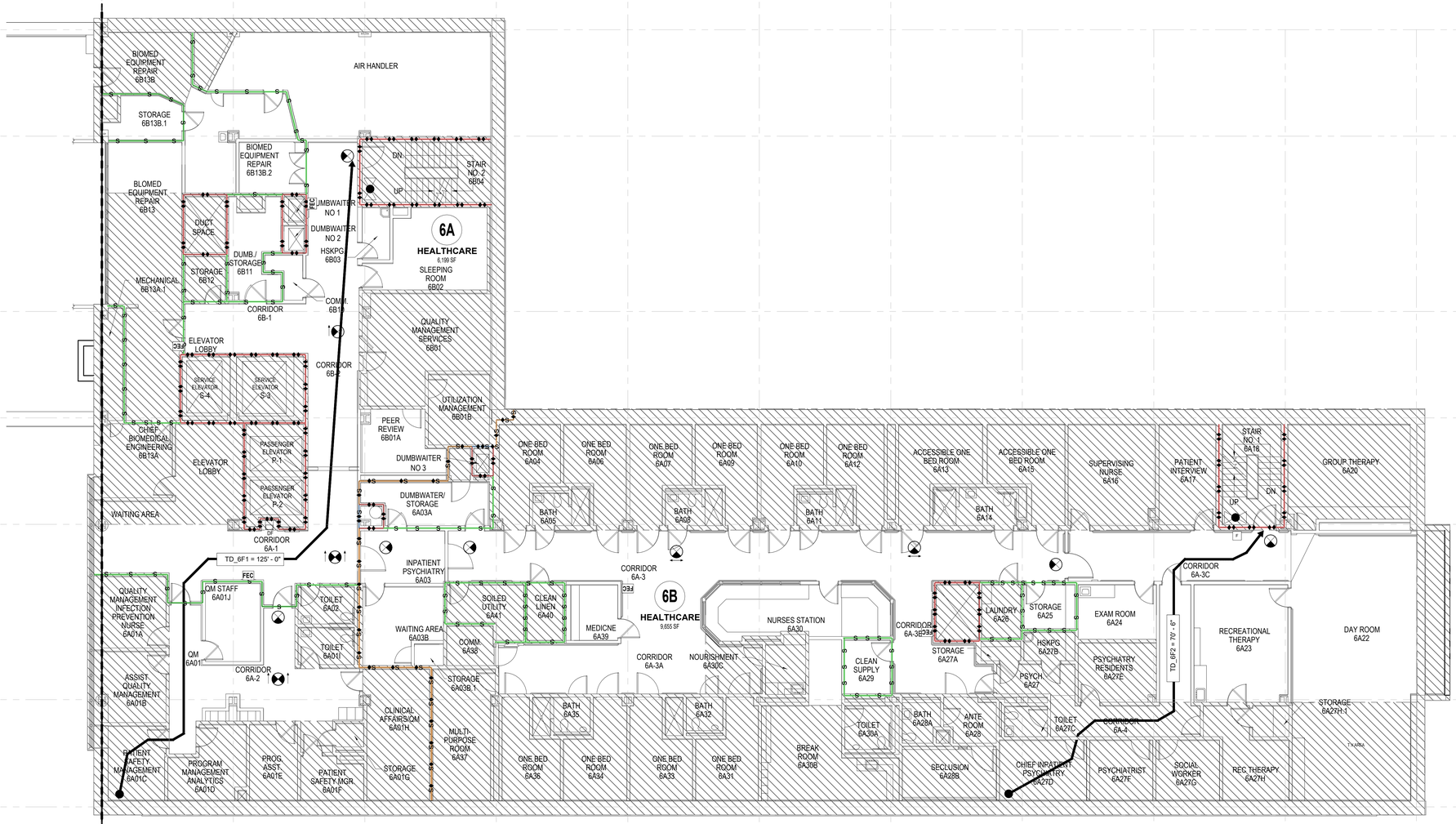
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | Y | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Z | SQUARE FOOTAGE |




1 GI108B 6TH FLOOR PLAN LIFE SAFETY - AREA B

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

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

## CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

## DESIGNER OF RECORD

**A/E:**
**DAVENERGY SOLUTIONS**
**2207 GARNET AVE, SUITE I**
**SAN DIEGO, CA 92109**
**619-770-8552**

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

REGISTERED PROFESSIONAL ENGINEER JOHN VELTRE No. 33020 Exp. 6/30/22 FIRE PROTECTION ENGINEER

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| **Drawing Title** SIXTH FLOOR PLAN LIFE SAFETY - AREA B | **Phase** BID SET | **Project Title** VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | **Project Number** 570-20-308 |
| **Approved: Approver** | - | | **Building Number** |
| | | **Location** FRESNO VA HOSPITAL 2615 E CLINTON AVE, FRESNO, CA 93703 | **Drawing Number** GI108B |
| | | **Issue Date** 05/04/2026 · **Checked** JVV · **Drawn** CHP | |

VA FORM 08 - 6231

Autodesk Docs://220010 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt

5/4/2026 12:19:45 PM

## SHEET KEYNOTES

## SHEET NOTES

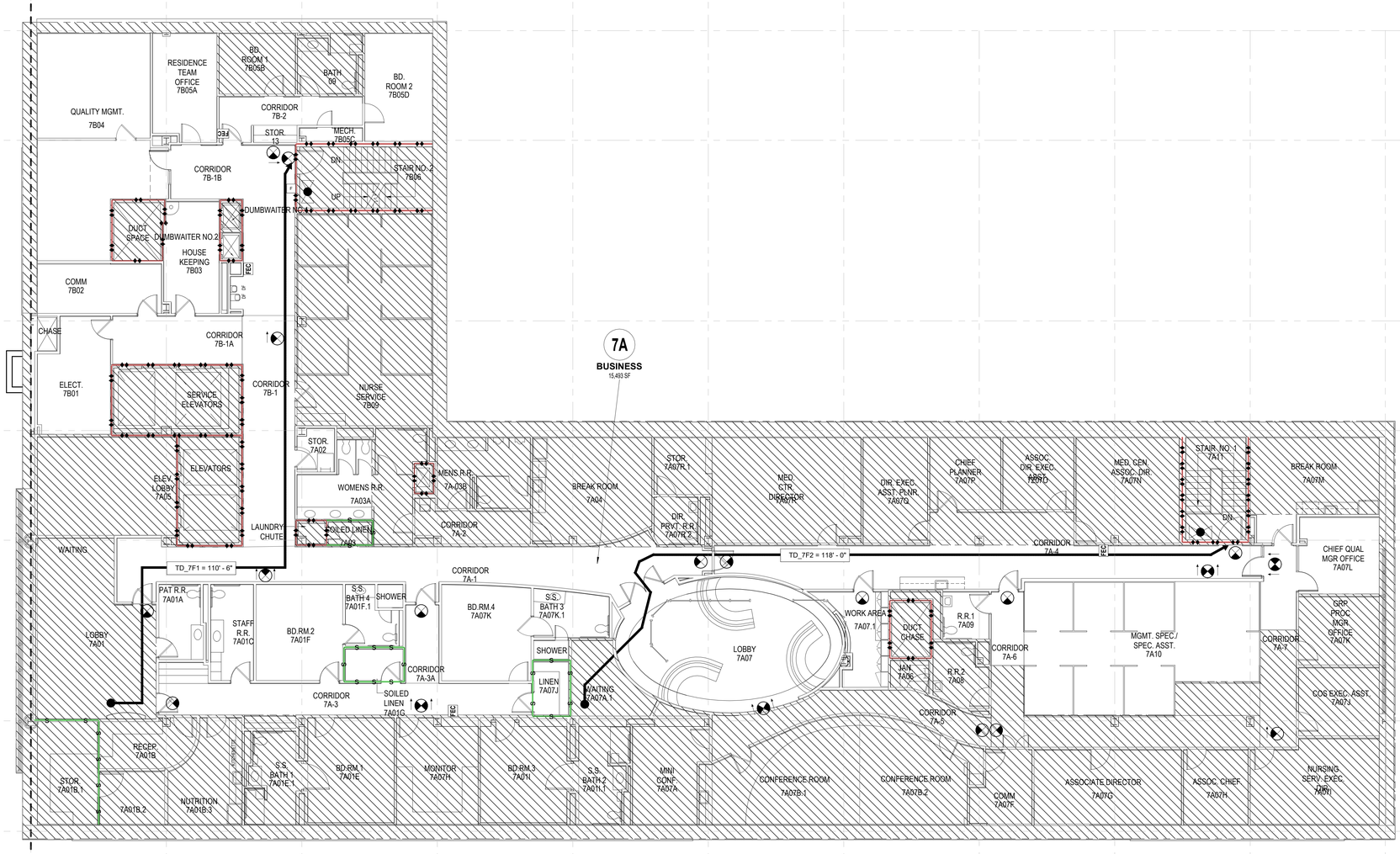
1. REFER TO GI-001 FOR GENERAL SHEET NOTES AND ABBREVIATIONS

## LIFE SAFETY SCOPE LEGEND

| | |
|---|---|
| | AREA OF WORK: WHERE CEILINGS WERE REMOVED, DOCUMENT EXISTING CONDITIONS AND VALIDATE AS-BUILT DRAWINGS TO ENSURE FACILITY IS CODE COMPLIANT. |
| | AREA NOT IN PROJECT SCOPE |

## LIFE SAFETY LEGEND

| | | | |
|---|---|---|---|
| S | SMOKE PARTITION | ‡ | STANDPIPE - FIRE |
| | 1 HOUR FIRE BARRIER | | WALL-MOUNTED FIRE DEPT. CONNECTION |
| | 2 HOUR FIRE BARRIER | O2 | EMERGENCY OXYGEN CONNECTION |
| S | 1 HOUR FIRE / SMOKE BARRIER | MGZV | MED GAS ZONE VALVE |
| S | 2 HOUR FIRE / SMOKE BARRIER | | DISCONNECT / SHUT-OFF VALVE |
| | SUITES | FACP | FIRE ALARM PANEL |
| FEC | FIRE EXTINGUISHER CABINET | | TRAVEL DISTANCE TO EXIT |
| | EXIT SIGN | | TRAVEL DISTANCE TO SMOKE COMPARTMENT, HORIZONTAL EXIT |
| FE | FIRE EXTINGUISHER | X | SMOKE COMPARTMENT |
| | | | OCCUPANCY TYPE |
| F | FIRE ALARM PULL STATION | Y / Z | SQUARE FOOTAGE |




1 / GI109B 7TH FLOOR PLAN LIFE SAFETY - AREA B

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

NORTH

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

## CONSULTANT

VELTRE ENGINEERING, INC.
FIRE PROTECTION ENGINEERING
LIFE SAFETY | CODE CONSULTING
2899 DICKENS ST, UNIT C-01
SAN DIEGO, CA 92106 (858)490-9043

## DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER
JOHN VELT FRANCIS
No. 33020
Exp. 6/30/27
MECHANICAL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: SEVENTH FLOOR PLAN LIFE SAFETY - AREA B | Phase: BID SET | Project Title: VACCHCS FRESNO REPLACE + EXPAND CHILLED WATER INFRASTRUCTURE | Project Number: 570-20-308 |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Building Number: |
| | | Issue Date: 05/04/2026 / Checked: JVV / Drawn: CHP | Drawing Number: GI109B |

VA FORM 08 - 6231

Autodesk Docs://220210 VA Fresno Chilled Water Infrastructure/Fresno Chilled Water Infrastructure - FP.rvt

5/4/2026 12:19:47 PM

## FIRM PANEL

### NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

**Coastal Base Flood Elevations** shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was California State Plane Zone IV (FIPS 404). The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

**Base map** transportation information shown on this FIRM was provided in digital format from Fresno County. Public Land Survey System information was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1997 or later.

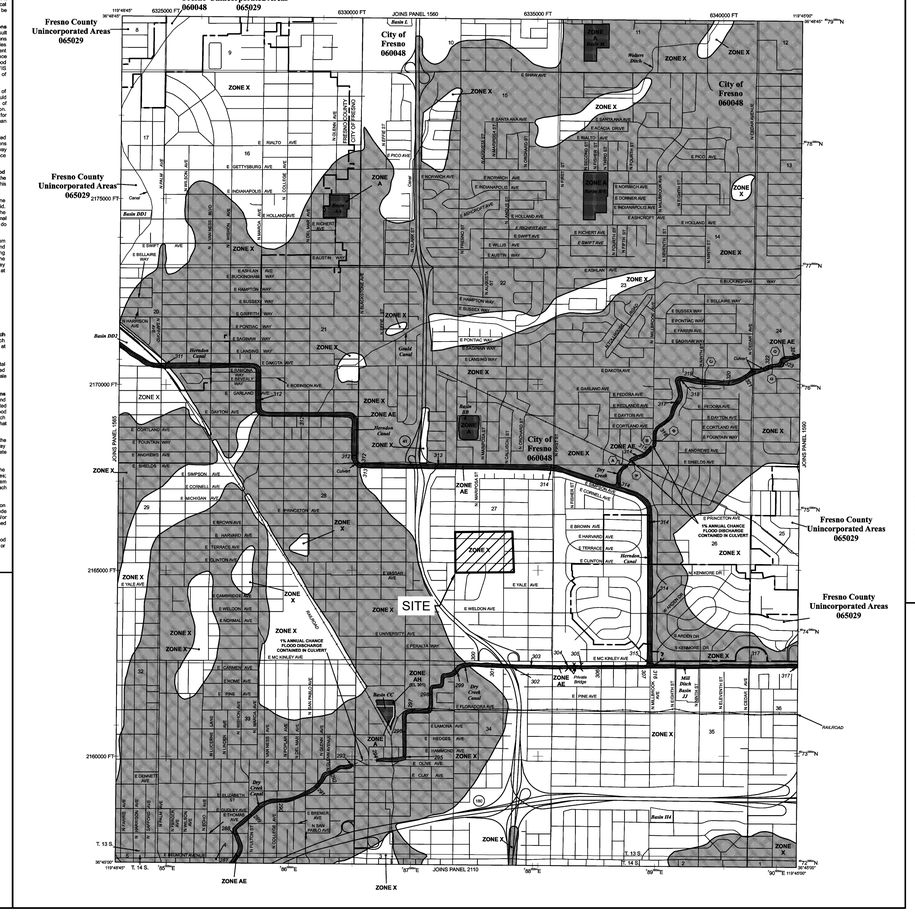
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which reflect previous channel configurations) may reflect stream channel distances that differ from what is shown on this map.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://msc.fema.gov.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.




### LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

| | |
|---|---|
| ZONE A | No Base Flood Elevations determined. |
| ZONE AE | Base Flood Elevations determined. |
| ZONE AH | Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined. |
| ZONE AO | Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined. |
| ZONE AR | Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood. |
| ZONE A99 | Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined. |
| ZONE V | Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined. |
| ZONE VE | Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined. |

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a river or other watercourse and the adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

| | |
|---|---|
| ZONE X | Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. |

OTHER AREAS

| | |
|---|---|
| ZONE X | Areas determined to be outside the 0.2% annual chance floodplain. |
| ZONE D | Areas in which flood hazards are undetermined, but possible. |

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

(EL 987) — Base Flood Elevation line and value; elevation in feet*

(EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

23 — Cross section Line

45°02'30", 93°08'00" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western hemisphere

7579000 M — 1000-meter Universal Transverse Mercator grid values, zone 15

600000 FT — 5000-foot grid ticks: California State Plane coordinate system, zone IV (FIPS0404 zone), Lambert Conformal Conic projection

DX5510 X — Bench mark (see explanation in Notes to Users section of this FIRM panel)

● M1.5 — Elev mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
July 19, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
February 18, 2009 - to update corporate limits, to change base flood elevations, floodway, and Special Flood Hazard Areas, to add roads and road halves and to incorporate previously issued Letters of Map Revision

1% ANNUAL CHANCE FLOOD DISCHARGES CONTAINED IN CULVERT

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program, at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET
CONTOUR INTERVAL 10 FEET
300 0 300 600 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1570H

**FIRM**
FLOOD INSURANCE RATE MAP

FRESNO COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1570 OF 3525
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

| COMMUNITY | NUMBER | PANEL | SUFFIX |
|---|---|---|---|
| FRESNO COUNTY | 065029 | 1570 | H |
| FRESNO, CITY OF | 060048 | 1570 | H |

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06019C1570H

MAP REVISED
FEBRUARY 18, 2009

Federal Emergency Management Agency

SCALE: NTS

N

## GENERAL NOTES

1. TOPOGRAPHIC INFORMATION PROVIDED BY SURVEY PERFORMED BY DALE G. MELL & ASSOCIATES DATED FEBRUARY 21, 2025. THE GENERAL CONTRACTOR SHALL VERIFY ALL SURVEY INFORMATION.
2. FRESNO VA HOSPITAL IS LOCATED IN ZONE X PER FEMA FLOOD MAP 06019C1570H EFFECTIVE DATE FEBRUARY 18, 2009.
3. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION AND GROUND PENETRATING RADAR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES PRIOR TO BEGINNING ANY WORK. IF UTILITIES OTHER THAN THOSE SHOWN HEREON ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY AND TAKE APPROPRIATE MEASURES TO PROTECT THE LINE(S) AND ENSURE CONTINUED SERVICE. DAMAGE CAUSED TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL VERIFY THE CONNECTION POINTS OF NEW UTILITIES TO EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
4. THE CONTRACTOR SHALL INSTALL TREE PROTECTION BARRICADES PRIOR TO BEGINNING EARTHWORK OPERATIONS.
5. THE CONTRACTOR SHALL NOTIFY THE COR IF UNSUITABLE MATERIAL IS DISCOVERED PRIOR TO BEGINNING ANY REMOVAL OPERATION. (SEE SPECIFICATION SECTION 31.20.00)
6. THE CONTRACTOR SHALL STABILIZE ALL DISTURBED AREA WITH SOD OR MULCH (NOT SHOWN), THIS INCLUDES STAGING AREA AND LAYDOWN AREAS.
7. CONTRACTOR SHALL GRADE ALL DISTURBED AREAS TO DRAIN FOR POSITIVE FLOW PRIOR TO FINAL APPROVAL.
8. THE DESIGN ADEQUACY AND SAFETY OF ALL BRACING, SHORING AND TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
9. THE CONTRACTOR'S MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES IN PERFORMING THE WORK IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR, WHO IS ALSO RESPONSIBLE FOR COMPLYING WITH ALL HEALTH AND SAFETY PRECAUTIONS AS REQUIRED BY ANY REGULATORY AGENCY.
10. THERE SHALL BE AT ALL TIMES, WHEN WORK IS BEING DONE, A COMPETENT PERSON WHO IS APPRISED OF THE CONDITION AND PROGRESS OF ALL AREAS OF WORK ON SITE. THIS COMPETENT PERSON SHALL BE ABLE TO SPEAK FOR AND ACT IN THE BEHALF OF THE CONTRACTOR. HE SHALL BE AWARE AND KNOWLEDGEABLE OF ALL THE SAFETY CONCERNS ON THE JOB SITE. HE SHALL BE EMPOWERED TO IMMEDIATELY AND EFFECTIVELY MITIGATE THE ACTIONS OF ANY WORKMAN ON SITE.
11. CONTRACTOR SHALL PREPARE AND SUBMIT A WELDING PLAN TO THE COR PRIOR TO PERFORMING ANY FIELD WELDING SHOULD IT BE REQUIRED. FOLLOWING APPROVAL, ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLAN.

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

PROJECT / CONSTRUCTION MANAGEMENT
ARCHITECTURE / ENGINEERING
PROJECT CONTROLS

56 Louis Prima Drive, Suite B, Covington, LA 70433
504.684.4408; Jordan Vandermeer

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

GEORGIA REGISTERED No. 44593 PROFESSIONAL ENGINEER JORDAN D. VANDERMEER
05/04/2026

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: CIVIL GENERAL NOTES

Phase: BID SET

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Project Number: 570-20-308

Building Number: N/A

Approved: PROJECT DIRECTOR

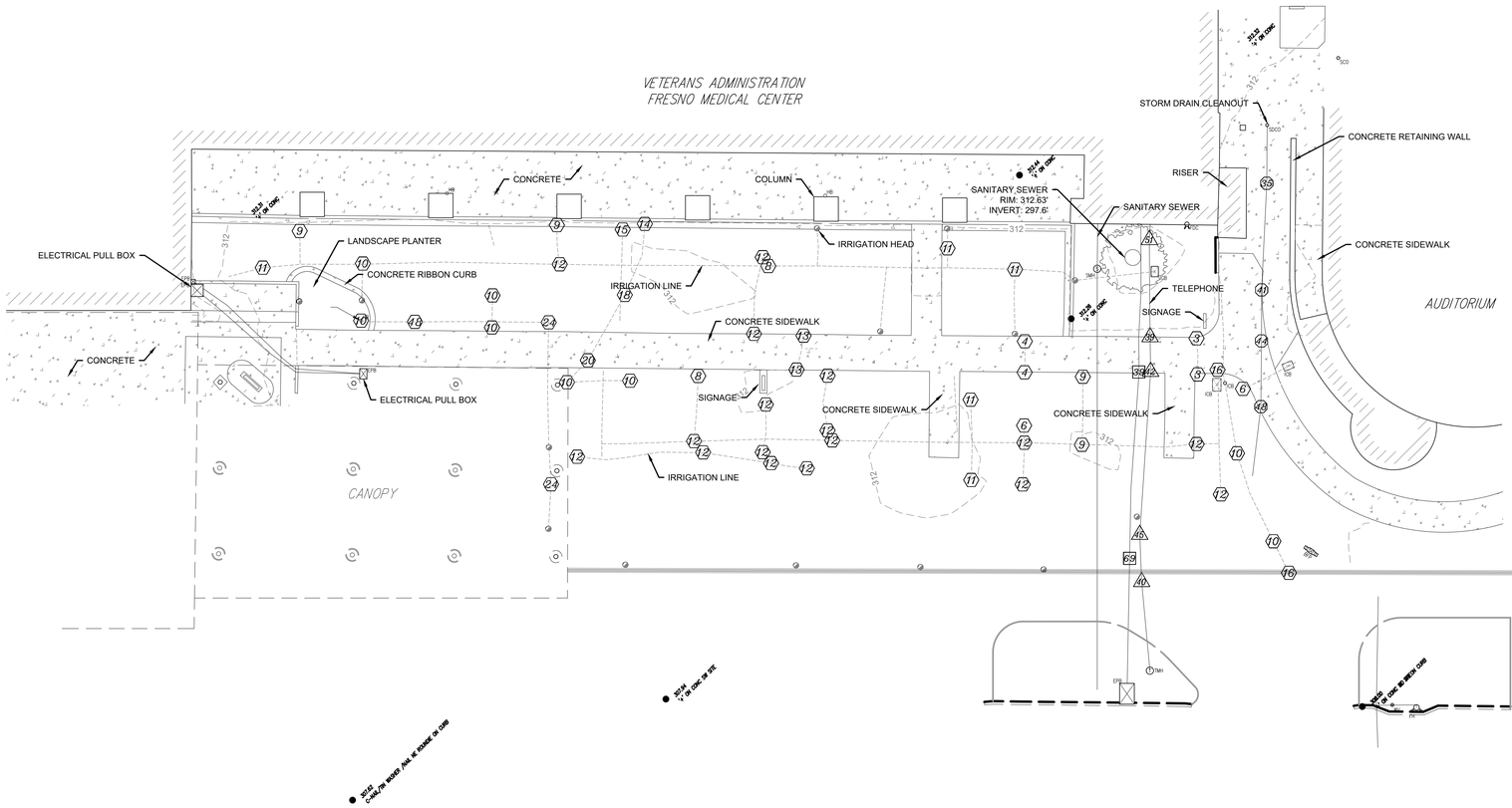
-

Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026 | Checked: SF | Drawn: JV

Drawing Number: CG101

VA FORM 08-6231



## VICINITY MAP

NOT TO SCALE

CALL "8-1-1" OR
1-800-642-2444
2 WORKING DAYS TO
14 CALENDAR DAYS
BEFORE YOU DIG

UNDERGROUND SERVICE ALERT (USA/NORTH)

## BENCHMARK:

CHISELED SQUARE ON CURB, SOUTH RETURN
SOUTHWEST CORNER OF FRESNO & CLINTON
TBM 4794

ELEV.=304.94 NGVD 29 DATUM

PROFESSIONAL LAND SURVEYOR
DALE G. MEEK
No. 4823
STATE OF CALIFORNIA

## LEGEND

- 220.2 — FIELD OBSERVATION POSITION AND ELEVATION
- BFP — EXISTING BACKFLOW PREVENTER
- FH — EXISTING FIRE HYDRANT
- EXISTING TREE (TYPE/DIA./DRIP LINE)
- EPB — EXISTING ELECTRICAL PULL BOX
- SMH — EXISTING SANITARY SEWER MANHOLE
- FDC — EXISTING FIRE DEPARTMENT CONNECTION
- TMH — EXISTING TELEPHONE MANHOLE
- HB — EXISTING HOSE BIB
- EXISTING SPRINKLER
- SCO — EXISTING SANITARY SEWER CLEAN OUT CHRISTY BOX (13"Ø) LID LABEL
- SDCO — EXISTING STORM DRAIN CLEANOUT LID LABEL
- SURVEY CONTROL POINT '+' ON CONC.
- SD — EXISTING STORM DRAIN LINE
- W — EXISTING WATER MAIN/LINE
- IRR — EXISTING IRRIGATION PIPELINE
- T — EXISTING UNDERGROUND TELEPHONE LINE ROUTE, APPROXIMATED
- S — EXISTING SANITARY SEWER MAIN/LINE
- UE — EXISTING UNDERGROUND ELECTRICAL LINE

## KEYNOTES:

NOTE: NUMBER DENOTES APPROXIMATE DEPTH IN INCHES OBTAINED FROM GPR

- 1 — LANDSCAPE IRRIGATION LINE
- 1 — STORM DRAIN LINE
- 1 — ELECTRICAL LINE
- 1 — TELEPHONE LINE
- 1 — WATER LINE

HORIZONTAL DATUM WGS 84 (UN-CONSTRAINED)
FROM GPS OBSERVATION

| CONTROL POINT | ELEVATION | EASTING | NORTHING |
|---|---|---|---|
| 1 | 308.00' | 6333454.6250 | 2165465.8340 |
| 2 | 307.94' | 6333340.7116 | 2165467.0614 |
| 3 | 312.26' | 6333407.0160 | 2165529.2966 |
| 6 | 312.44' | 6333398.5528 | 2165552.8072 |

## ABBREVIATIONS

| | |
|---|---|
| C | CONCRETE ELEVATION POINT |
| D | DIRT/GROUND ELEVATION POINT |
| EPB | ELECTRICAL PULL BOX |
| FDC | FIRE DEPARTMENT CONNECTION |
| FG | FINISHED GRADE |
| FH | FIRE HYDRANT |
| INV | INVERT |
| GPR | GROUND PENETRATING RADAR |
| IB | IRRIGATION BOX |
| LS | LANDSCAPE |
| (N) | NORTH DIRECTION |
| P | PAVEMENT ELEVATION POINT |
| (S) | SOUTH DIRECTION |
| SC | STRUCTURAL COLUMN |
| SMH | SEWER MANHOLE |
| TC | TOP OF CURB ELEVATION POINT |
| WV | WATER VALVE |

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

PROJECT / CONSTRUCTION MANAGEMENT
ARCHITECTURE / ENGINEERING
PROJECT CONTROLS

56 Louis Prima Drive, Suite B, Covington, LA 70433
504.684.4408; Jordan Vandermeer

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 44594 JORDAN D. VANDERMEER
05/04/2026

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

**Drawing Title**
TOPOGRAPHICAL SURVEY

**Phase**
BID SET

**Approved: PROJECT DIRECTOR**
-

**Project Title**
REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

**Project Number**
570-20-308

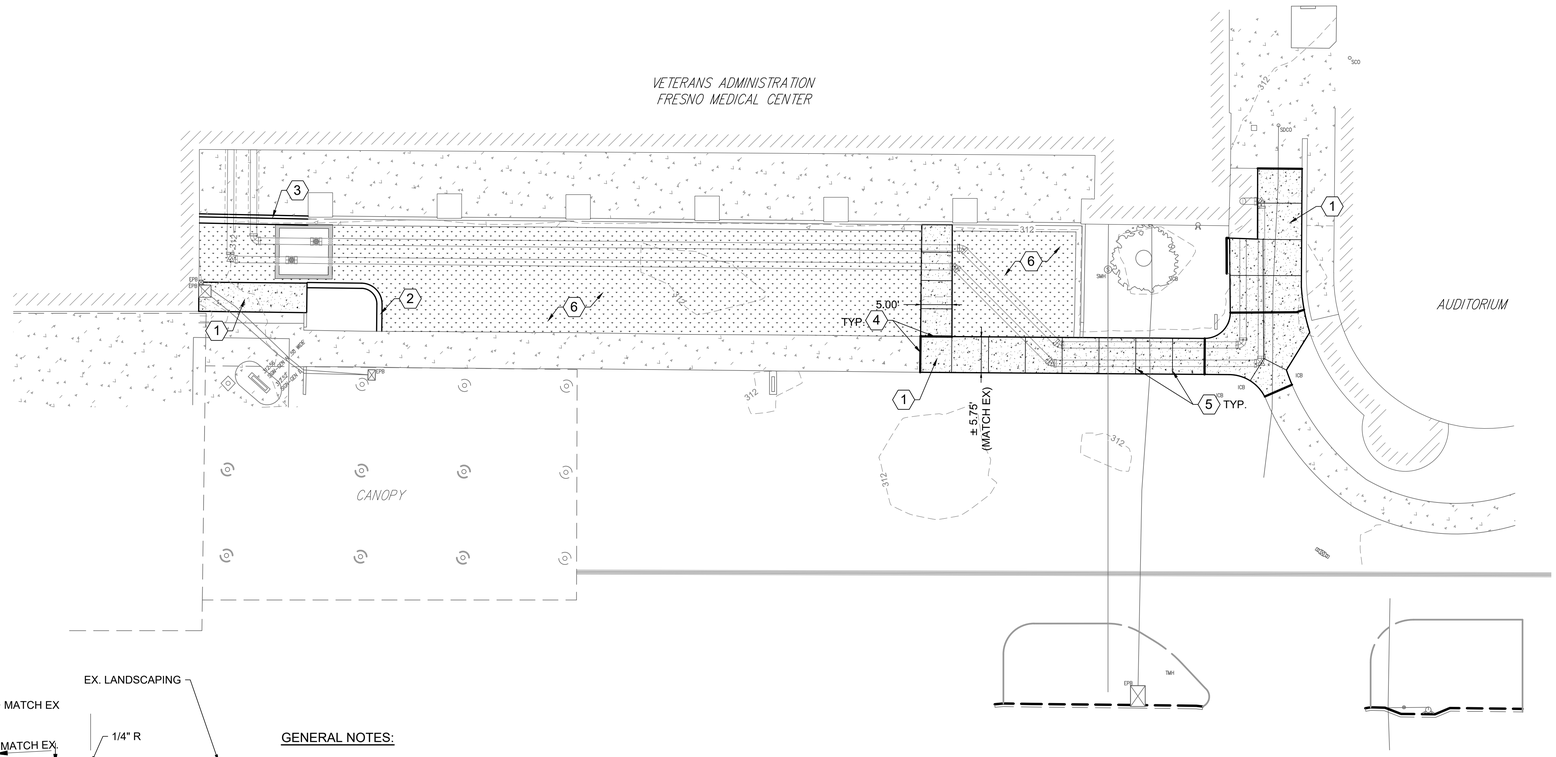
**Building Number**
N/A

**Location**
FRESNO VA HOSPITAL
2615 E CLINTON AVE, FRESNO, CA 93703

**Drawing Number**
V-101

| Issue Date | Checked | Drawn |
|---|---|---|
| 05/04/2026 | SF | JV |

VA FORM 08-6231




## LEGEND AND SYMBOLS

* SEE TOPOGRAPHIC SURVEY FOR EXISTING CONDITIONS LEGEND

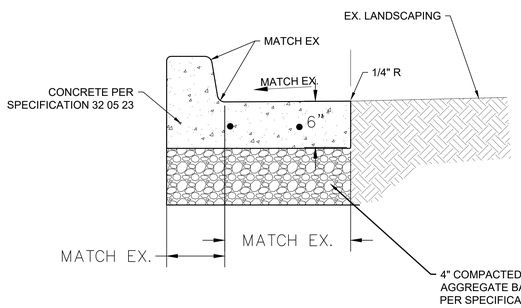
- CONCRETE SIDEWALK
- TURF GRASS SOD
- UTILITY VAULT
- CONCRETE CURB & GUTTER
- LANDSCAPE CURBING
- EXPANSION JOINT
- CONTRACTION JOINT

## KEYED NOTES

1. CONCRETE SIDEWALK, SEE DETAIL F1 THIS SHEET.
2. LANDSCAPE CURBING, SEE DETAIL D5 THIS SHEET.
3. CONCRETE CURB & GUTTER, SEE DETAIL D1 THIS SHEET.
4. EXPANSION JOINT, SEE DETAIL F8 THIS SHEET.
5. CONTRACTION JOINT, SEE DETAIL F5 THIS SHEET.
6. TURF GRASS SOD, SEE GENERAL NOTES THIS SHEET.

## GENERAL NOTES:

1. CONTRACTOR SHALL MATCH EXISTING CONCRETE SIDEWALK THICKNESS AND FINISHES WHERE REPLACEMENT IS REQUIRED.
2. CONTRACTOR SHALL MATCH EXISTING CURB PROFILE, THICKNESS AND FINISH WHERE REPLACEMENT IS REQUIRED.
3. CONTRACTOR SHALL INSTALL A TURF GRASS SOD WITHIN THE AREAS SHOWN TO MATCH EXISTING SPECIES ON SITE.
4. CONTRACTOR SHALL REPLACE ALL IRRIGATION APPURTENANCES THAT ARE REQUIRED TO BE REMOVED FOR THE INSTALLATION OF THE UTILITY LINES.

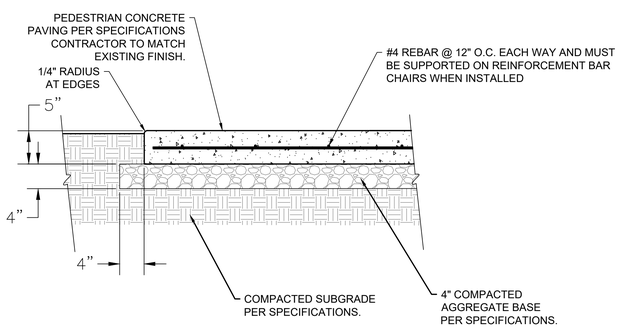



### GENERAL NOTES:

1. TWO ROWS OF #4 BARS CENTERED AS SHOWN.
2. EXPANSION JOINTS SHALL BE PLACED AT ALL LOCATIONS WHERE NEW MEETS EXISTING W/ TWO DOWELS.

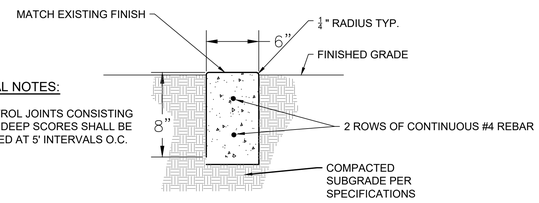
## D1 CURB AND GUTTER

SCALE: NTS




## F1 CONCRETE SIDEWALK

SCALE: NTS

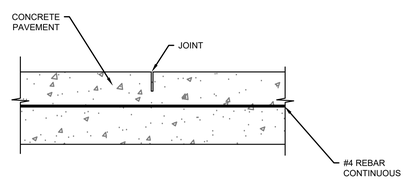



### GENERAL NOTES:

1. CONTROL JOINTS CONSISTING OF 1" DEEP SCORES SHALL BE PLACED AT 5' INTERVALS O.C.

## D5 LANDSCAPE CURBING

SCALE: NTS

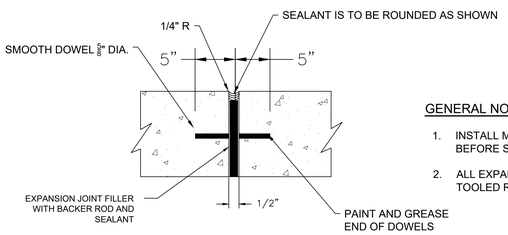



### GENERAL NOTES:

1. JOINT SHALL BE SAW CUT TO MATCH EXISTING.
2. MAXIMUM JOINT SPACING SHALL BE 10' O.C.
3. JOINT DEPTH TO BE 1/4 OF PAVEMENT THICKNESS

## F5 CONTRACTION JOINT

SCALE: NTS




### GENERAL NOTES:

1. INSTALL MASON SAND ON TOP OF SEALANT BEFORE SEALANT CURES.
2. ALL EXPANSION JOINTS ARE TO HAVE A 1/4" TOOLED RADIUS.

## F8 EXPANSIOIN JOINT

SCALE: NTS

0 10 20 30

1 INCH = 10 FEET

N

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

PROJECT / CONSTRUCTION MANAGEMENT
ARCHITECTURE / ENGINEERING
PROJECT CONTROLS

56 Louis Prima Drive, Suite B, Covington, LA 70433
504.684.4408; Jordan Vandermeer

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 44594 JORDAN D. VANDERMEER

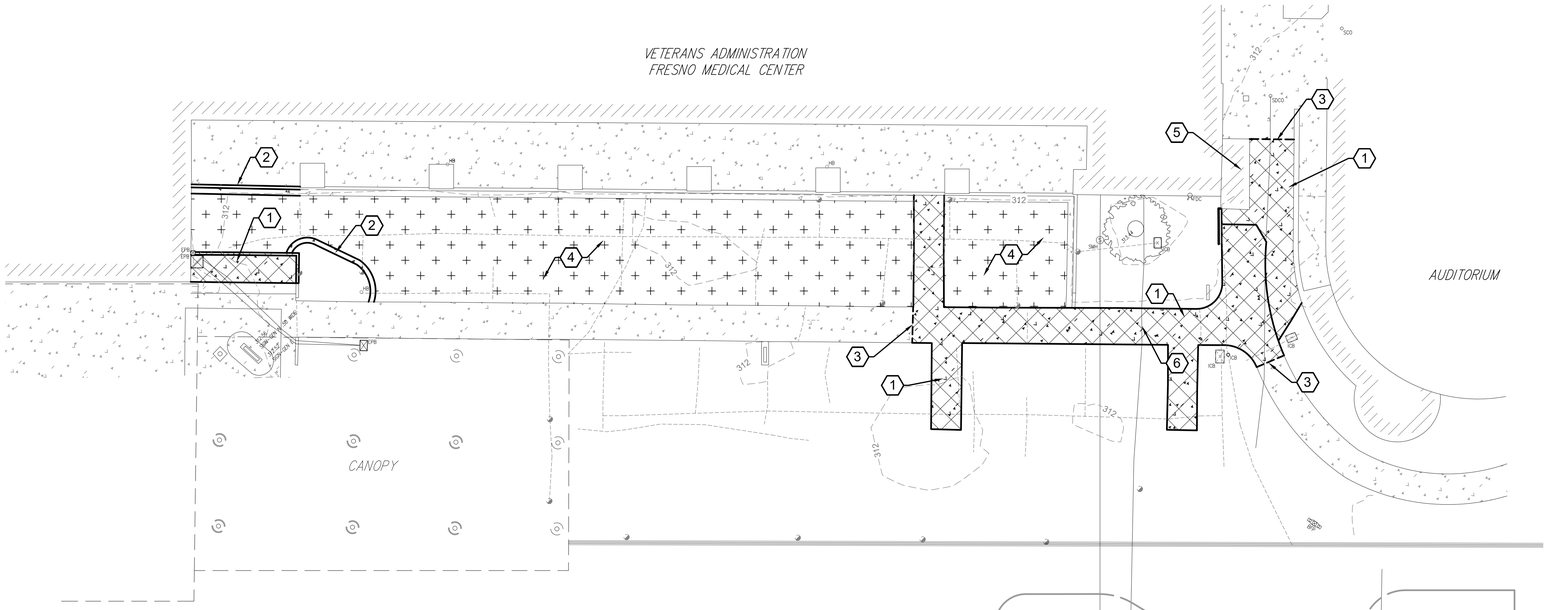
05/04/2026

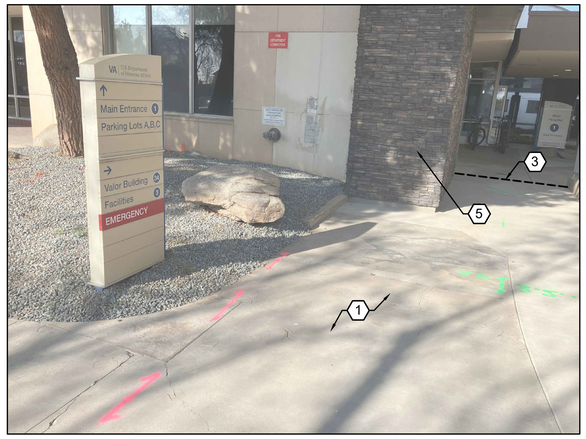
Office of Construction and Facilities Management

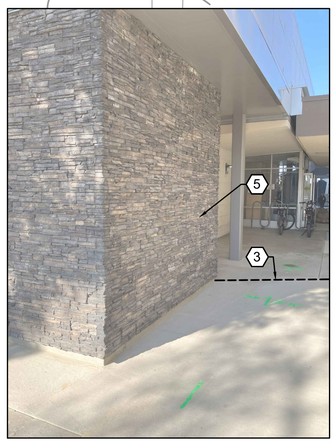
VA U.S. Department of Veterans Affairs

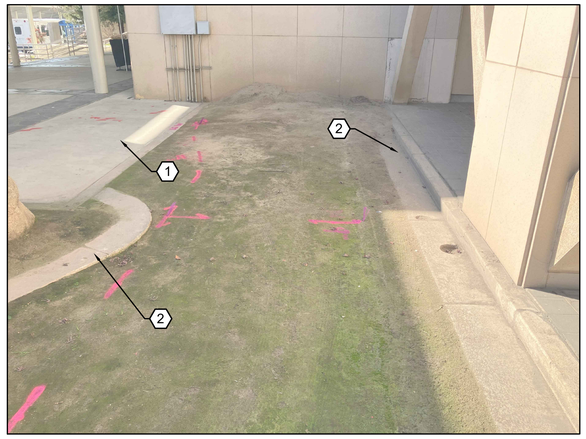
| | | | |
|---|---|---|---|
| Drawing Title: SITE PLAN | Phase: BID SET | Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC | Project Number: 570-20-308 |
| | | | Building Number: N/A |
| Approved: PROJECT DIRECTOR | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Drawing Number: C-101 |
| | | Issue Date: 05/04/2026 · Checked: SF · Drawn: JV | |

VA FORM 08-6231







## LEGEND AND SYMBOLS

* SEE TOPOGRAPHIC SURVEY FOR EXISTING CONDITIONS LEGEND

- DEMO CONCRETE SIDEWALK
- DEMO TURF GRASS
- CURBING REMOVAL
- CONCRETE SAW CUT

## KEYED NOTES

1. REMOVE EXISTING CONCRETE SIDEWALK.
2. REMOVE EXISTING CURBING.
3. SAW CUT EXISTING CONCRETE.
4. REMOVE AND RE-INSTALL EXISTING IRRIGATION AS NECESSARY TO INSTALL PROPOSED UTILITIES. SEE GENERAL NOTES THIS SHEET.
5. REMOVE STONE FACADE AS REQUIRED FOR UTILITY INSTALLATION. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
6. RELOCATE TELECOMMUNICATIONS LINE AS NECESSARY FOR INSTALLATION. SERVICE SHALL NOT BE DISRUPTED.

0 10 20 30
1 INCH = 10 FEET

N

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

PROJECT / CONSTRUCTION MANAGEMENT
ARCHITECTURE / ENGINEERING
PROJECT CONTROLS

56 Louis Prima Drive, Suite B, Covington, LA 70433
504.684.4408; Jordan Vandermeer

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

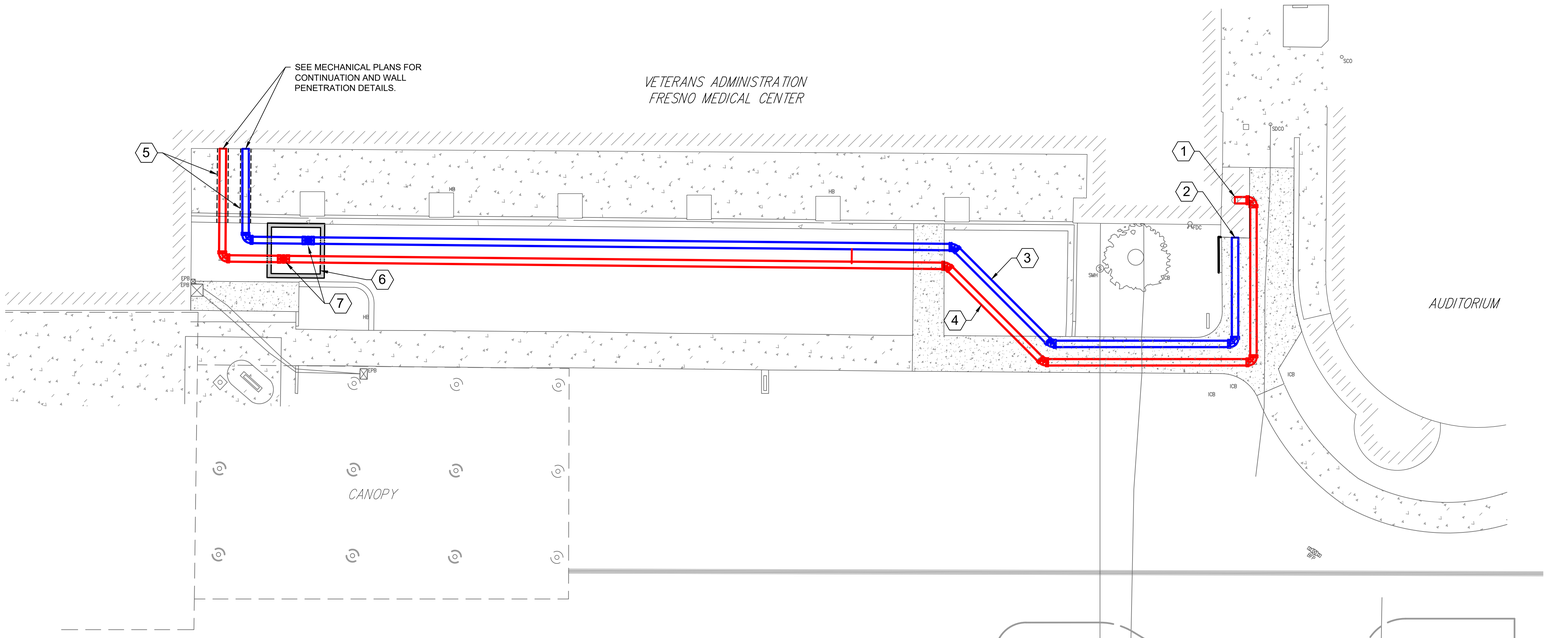
GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 44694 JORDAN D. VANDERMEER
05/04/2026

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| | | | |
|---|---|---|---|
| Drawing Title: DEMOLITION PLAN | Phase: BID SET | Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC | Project Number: 570-20-308 |
| Approved: PROJECT DIRECTOR | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Building Number: N/A |
| | | Issue Date: 05/04/2026 · Checked: SF · Drawn: JV | Drawing Number: CD101 |

VA FORM 08-6231



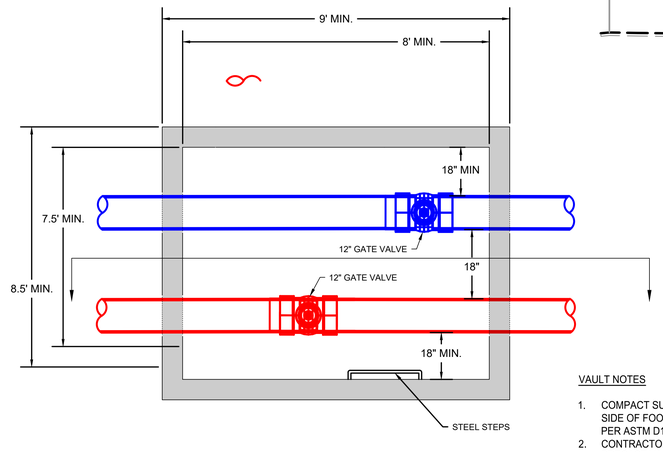

## LEGEND AND SYMBOLS

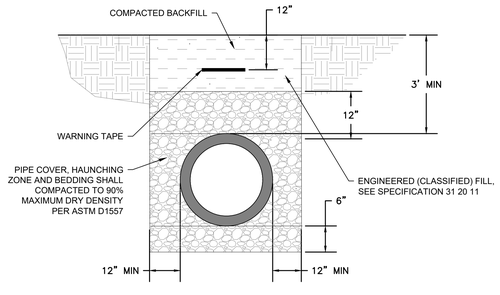
* SEE TOPOGRAPHIC SURVEY FOR EXISTING CONDITIONS LEGEND

- UTILITY VAULT
- 12" WATER SUPPLY
- 12" WATER RETURN
- 20" STEEL CASING

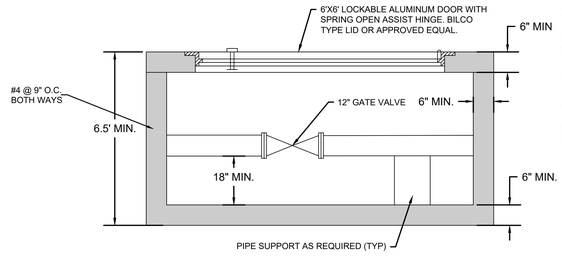
## KEYED NOTES

1. CONNECT TO EXISTING WATER SUPPLY, SEE MECHANICAL SHEETS FOR MORE INFORMATION.
2. CONNECT TO EXISTING WATER RETURN, SEE MECHANICAL SHEETS FOR MORE INFORMATION,
3. 12" WATER SUPPLY, SEE SPECIFICATION 23 21 13 FOR MATERIAL REQUIREMENTS..
4. 12" WATER RETURN, SEE SPECIFICATION 23 21 13 FOR MATERIAL REQUIREMENTS.
5. JACK AND BORE STEEL CASING SLEEVE.
6. 10' X 7.5' PRECAST UTILITY VAULT.
7. 12" GATE VALVE.




F2 UITLITY TRENCHING
SCALE: NTS



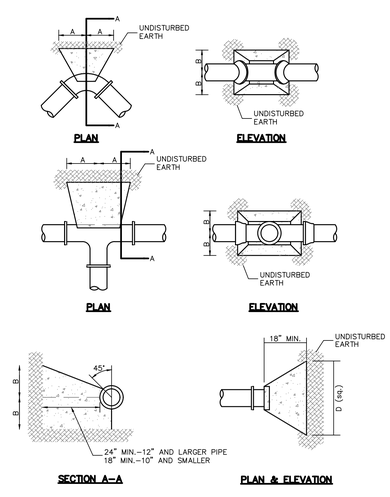

F5 VALVE VAULT
SCALE: NTS

VAULT NOTES

1. COMPACT SUBGRADE UNDER AND 12" EITHER SIDE OF FOOTING TO 95% MAXIMUM DRY DENSITY PER ASTM D1557.
2. CONTRACTOR TO PROVIDE SUBMITTAL FOR PRECAST VAULT FOR APPROVAL.
3. PRECAST VAULT TO HAVE #4 REBAR @ 9" O.C. BOTH WAYS.
4. CONCRETE SHALL BE 4000 PSI MINIMUM.
5. PIPE PENETRATION VOIDS TO BE FILLED WITH NON-SHRINK GROUT.
6. ALL PIPING THROUGH VAULT SHALL BE DUCTILE IRON PIPE.
7. HATCH SHALL HAVE POSITIVE LOCK AT 90 DEGREES.
8. HATCH SHALL HAVE PADLOCKING CAPABILITIES.
9. VAULT TO HAVE STEEL STEPS CAST IN PLACE AT THE TIME OF FABRICATION.

9.1. MAXIMUM STEP SPACING SHALL BE 15"

| SIZE | 1/4 BENDS | | 1/8 BENDS | | 1/16 BENDS | |
|---|---|---|---|---|---|---|
| | A | B | A | B | A | B |
| 12" | 26" | 17" | 14" | 17" | 10" | 13" |




D9 THRUST BLOCKS
SCALE: NTS

0 10 20 30
1 INCH = 10 FEET

N

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

PROJECT / CONSTRUCTION MANAGEMENT
ARCHITECTURE / ENGINEERING
PROJECT CONTROLS

56 Louis Prima Drive, Suite B, Covington, LA 70433
504.684.4408; Jordan Vandermeer

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP
GEORGIA REGISTERED No. 44694 PROFESSIONAL ENGINEER JORDAN D. VANDERMEER
05/04/2026

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: UTILITY PLAN

Phase: BID SET

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Project Number: 570-20-308

Building Number: N/A

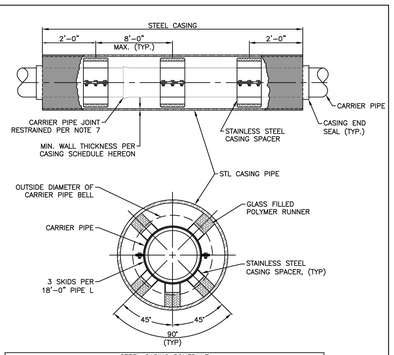
Approved: PROJECT DIRECTOR

Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703

Drawing Number: C-102

Issue Date: 05/04/2026 | Checked: SF | Drawn: JV

VA FORM 08–6231




| STEEL CASING SCHEDULE | | | |
|---|---|---|---|
| NOMINAL CARRIER PIPE SIZE | NOMINAL MINIMUM CASING SIZE | MINIMUM WALL THICKNESS | |
| | | STREETS & HIGHWAYS | RAILROADS |
| 6" | 16" | 0.250" | 0.281" |
| 8" | 18" | 0.250" | 0.312" |
| 10" | 20" | 0.250" | 0.344" |
| 12" | 22" | 0.250" | 0.344" |
| 14" | 26" | 0.312" | 0.406" |
| 16" | 28" | 0.312" | 0.438" |
| 24" | 38" | 0.375" | 0.562" |
| 30" | 44" | 0.500" | 0.657" |

NOTES:

1. REFER TO STANDARD SPECIFICATIONS SECTION 19 – JACKING PIPE.
2. SIZE AND THICKNESS OF CASING SHALL BE AS SHOWN IN STEEL CASING SCHEDULE HEREON. FOR LONG BORES OR SPECIAL SITUATIONS GREATER WALL THICKNESS THAN SHOWN IN SCHEDULE MAY BE REQUIRED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STRUCTURAL SUFFICIENCY OF THE CASING DURING CONSTRUCTION AND ALSO THE METHOD OF INSTALLATION.
3. CASING INSTALLATIONS AND WALL THICKNESS UNDER RAILROADS ARE SUBJECT TO APPROVAL BY THE APPROPRIATE RAILWAY AUTHORITY.
4. CASING SPACERS SHALL BE STAINLESS STEEL CENTER RESTRAINED POSITION TYPE.
5. INSTALL A MINIMUM OF THREE (3) CASING SPACERS PER 18' OF CARRIER PIPE SECTION, EQUALLY SPACED.
6. EACH END OF CASING SHALL BE SEALED WITH AN APPROVED RUBBER CASING END SEAL SECURED WITH STAINLESS STEEL BANDS.
7. CARRIER PIPE SHALL BE DUCTILE IRON AND ALL JOINTS INSIDE THE STEEL CASING AND A MINIMUM OF 5' OUTSIDE THE STEEL CASING SHALL BE RESTRAINED. REFER TO STANDARD SPECIFICATION SECTION 21-15 FOR RESTRAINTS.
8. 45° PIPELINE RISERS RUNNING FROM CARRIER PIPE TO TYPICAL DEPTH PIPELINE SHALL BE DUCTILE IRON WITH ALL JOINTS RESTRAINED.

INSTALLATION OF WATER PIPE
IN JACKED STEEL CASING

REF. & REV.
~~AUG. 2002~~
MAR. 2021 (A.7)

CITY OF FRESNO
W-24

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

PROJECT / CONSTRUCTION MANAGEMENT
ARCHITECTURE / ENGINEERING
PROJECT CONTROLS

56 Louis Prima Drive, Suite B, Covington, LA 70433
504.684.4408; Jordan Vandermeer

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

GEORGIA REGISTERED No. 44593 PROFESSIONAL ENGINEER JORDAN D. VANDERMEER
05/04/2026

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: DETAILS

Phase: BID SET

Approved: PROJECT DIRECTOR

-

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Location: FRESNO VA HOSPITAL
2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026
Checked: SF
Drawn: JV

Project Number: 570-20-308
Building Number: N/A
Drawing Number: C-501

VA FORM 08-6231

## GENERAL

1. General notes and typical details apply to all structural features, unless otherwise indicated.
2. If certain features are not fully shown or called out on the drawings or in the specifications, their construction shall be of the same character as for similar conditions.
3. The project specifications form a part of the contract documents.
4. Specifications, codes and standards noted in the contract documents shall be the latest edition, unless otherwise noted.
5. Dimensions shall not be scaled off of the drawings.
6. All work shall conform to minimum standards of the 2024 International Building Code, the VA H-18-8 Seismic Design Requirements, any codes listed in the drawings or specifications and any regulating agencies which have authority over any portion of the work.
7. Prior to submitting shop drawings and product data, the Contractor shall verify that the submittals meet the requirements of the drawings and specifications. The Contractor shall specifically note any exceptions to these requirements with the submittal.
8. The Contractor shall maintain a continuous fire watch, with extinguishing equipment immediately available during welding, cutting or burning near combustible materials.
9. Openings, pockets, etc. shall not be placed in structural members unless specifically detailed on the structural drawings. Notify the Structural Engineer when work requires openings, pockets, etc. in structural members not shown on the structural drawings.
10. The Contractor shall be responsible for coordinating the work of all trades and shall check all dimensions and holes and openings required in structural members. All discrepancies shall be called to the attention of the Architect/Engineer and shall be resolved before proceeding with the work.
11. Construction materials shall be spread out if placed on framed floors or roofs. Load shall not exceed the design live load per square foot. Provide adequate shoring where overload is anticipated.

## DESIGN DATA

1. Code: 2024 International Building Code and VA H-18-8 Seismic Design Requirements.
2. Risk Category per VA H-18-8: IV
3. Earthquake Design Data:

| | | |
|---|---|---|
| Mapped Spectral Response | | |
| | $S_S$: | 0.70 g |
| | $S_1$: | 0.23 g |
| Site Class: | | D (default) |
| Spectral Response Coefficients | | |
| | $S_{DS}$: | 0.65 g |
| | $S_{D1}$: | 0.41 g |

## EXISTING CONSTRUCTION

1. Work shown is new unless noted as existing: (E).
2. Existing construction shown on these drawings was obtained from as-built drawings dated March 1947 and can be used for bidding purposes. The contractor shall verify all existing job conditions, review all drawings and verify dimensions prior to construction. The Contractor shall notify the Architect/Engineer of all discrepancies and exceptions before proceeding with the work.
3. The removal, cutting, drilling, etc. of existing work shall be performed with care in order not to jeopardize the structural integrity of the building. If structural members or mechanical, electrical or architectural features not indicated for removal interfere with the new work, notify the Architect/Engineer immediately and obtain approval before removal of members.
4. The Contractor shall safely shore existing construction wherever existing supports are removed for the new work.
5. The Contractor shall perform the work with minimal inconvenience to the Owner and without interruption of day-to-day work operations. The Contractor shall ensure safe travel of persons around areas of construction and shall coordinate all operations with the Owner or the Owner's agent.
6. The Contractor shall promptly repair any damage caused during operations, using materials and workmanship similar to that which was damaged.
7. All removed items, materials and debris, unless otherwise noted, shall be removed promptly from the site and disposed of in a legal manner.

## STRUCTURAL STEEL & MISC. METALS

1. Fabrication and erection of structural steel shall be in accordance with the "Code of Standard Practice for Steel Buildings and Bridges" AISC 303-22, as modified by the project specifications.
2. Materials (Carbon Steel unless otherwise noted):
   - A. W shapes: ASTM A992 ($F_y$=50 ksi)
   - B. Channels & angles: ASTM A36 ($F_y$=36 ksi)
   - C. All other shapes & plates: ASTM A572 grade 50 unless otherwise noted
   - D. Structural tubes (rectangular HSS): ASTM A1085 grade A ($F_y$=50 ksi) or ASTM A500 grade C ($F_y$=50 ksi)
   - E. Structural tubes (round HSS): ASTM A1085 grade A ($F_y$=50 ksi) or ASTM A500 grade C ($F_y$=46 ksi)
   - F. Structural pipes: ASTM A53 grade B ($F_y$=35 ksi)
3. Materials (Stainless Steel, where denoted "SS"):
   - A. Plates (316L): ASTM A240 ($F_y$=25 ksi)
   - B. Structural tubes (316L): ASTM A554 with supplementary requirement S2. ($F_y$=25 ksi)
   - C. Structural pipes (316L): ASTM A312 ($F_y$=25 ksi)
   - D. Hex bolts (316): ASTM F593
   - E. Anchor rods (316): ASTM F593
4. Bolts (High-strength unless otherwise noted):
   - A. High-strength bolts: ASTM F3125, Grade A325, Type 1 or ASTM A325-N
   - B. Machine bolts: ASTM A307
   - C. Anchor rods: ASTM F1554 grade 55 with supplementary requirement S1.
5. Joint type for bolted connections shall be snug-tightened (ST), unless otherwise noted as pretensioned (PT) or slip-critical (SC).
6. For ST joints, design is based on bolt threads included in the shear plane (Thread Condition N).
7. Faying surface for slip-critical (SC) bolts shall be Class A, unless otherwise noted, with bolt slip considered at the factored load level.
8. Bolt holes in steel shall be 1/16 inch larger diameter than nominal size of bolt used, unless otherwise noted.
9. For bolted connections, provide 1 1/2 inch edge and end distance, unless otherwise noted.
10. All welds shall be prequalified or qualified by test in conformance with the "Structural Welding Code - Steel" (AWS D1.1-15) of the American Welding Society. Submit Welding Procedure Specifications for approval prior to performing work. Submit Procedure Qualification Reports with Welding Procedure Specifications for welds qualified by test.
11. Minimum tensile strength of weld metal shall be 70 ksi typical, unless otherwise noted. Welding electrodes shall be as recommended by their manufacturer for the position and other conditions of actual use.
12. Weld symbols shown on the drawings do not necessarily differentiate between shop weld and field welds. When field welds are necessary due to construction procedure or sequence, welds shall be provided and be inspected per specifications. All welds shown as field welds shall be done in field as indicated.
13. All structural steel surfaces are to be painted or galvanized, unless noted otherwise. Steel that is not exposed to weather and is to be encased in concrete shall be left uncoated. Steel that is to receive spray-applied fireproofing shall be left uncoated. Faying surfaces of high-strength bolted connections and areas within 3 inches of field welded joints shall be left uncoated until welding and bolting operations are complete. See specifications for coating requirements.
14. All structural steel, miscellaneous metal and connectors exposed to weather shall be hot-dip galvanized in accordance with ASTM A123 after fabrication. Apply zinc-rich paint complying with SSPC-Paint 20 to repair damaged or cut surfaces, field welds, and field-drilled holes in galvanized steel. Application shall comply with ASTM A780, including Annex A2.
15. All holes in steel members to facilitate galvanizing, including all vent holes and drain holes, shall be shown on shop drawings. Holes shall not be cut prior to approval of shop drawings.
16. All faying surfaces for friction-bolted connections of galvanized members shall be roughened by means of hand wire brushing after galvanizing and before erection.
17. No penetrations in structural steel members are allowed except as indicated on the structural drawings.
18. Camber:
    - A. Provide upward camber to all members shown to have camber. Amount measured in field prior to installation shall not deviate more than allowed by the AISC specifications. Do not camber members located below elevator doors.
    - B. Beams detailed without specified camber shall be fabricated so that after erection, any minor camber due to rolling or shop assembly shall be upward. Top of all members shall be clearly identified.
19. For fireproofing requirements, see architectural drawings and specifications
20. Furnish shop and erection drawings of all structural steel for the Architect/Engineer's review before fabrication.

## CONCRETE & REINFORCING STEEL

1. All concrete shall be ready-mix in accordance with ASTM C94.
2. Cement: ASTM C150 Type II.
3. Aggregate: ASTM C33.
4. Non-shrink Grout: ASTM C1107, premixed, non-staining, non-shrink grout. Minimum compressive strength at 28 days, per ASTM C109/C109M: 8,000 psi.
5. Grout or concrete containing more than 0.1 percent of soluble chloride shall not be used.
6. Mixes are to be reviewed by owner's testing lab and submitted to the Architect/Engineer for approval. Do not cast concrete without approval by Architect/Engineer.

| Concrete | Strength | Max. Agg. Size | Max. W/C Ratio | Air Content | Exposure Class |
|---|---|---|---|---|---|
| Slab-on-grade | 3000 psi | 1" | 0.50 | 1 1/2% ± 1/2% | |
| Foundations | 4000 psi | 1 1/2" | 0.45 | 1 1/2% ± 1 1/2% | W1, C1 |
| Columns | 4000 psi | 1 1/2" | 0.45 | 1 1/2% ± 1 1/2% | |
| Beams, Walls | 4000 psi | 3/4" | 0.45 | 1 1/2% ± 1 1/2% | |
| Shotcrete | 4000 psi | 3/8" | 0.45 | 1 1/2% ± 1 1/2% | |
| Other | 3000 psi | 1" | | | |

The exposure class for all concrete types shall be considered as F0, S0, W0, C0, except where noted otherwise. Mix designs for each concrete type shall conform to the limitations for the applicable exposure classes, as indicated in ACI 318-19, Section 19.3.

See specifications for additional requirements. All concrete shall be hard rock aggregate, regular-weight concrete, 145 pcf, unless otherwise noted.

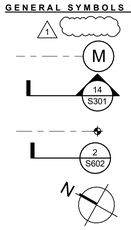
7. Inserts: All items to be cast in concrete, such as reinforcing dowels, bolts, anchors, pipes, sleeves, etc., shall be securely positioned in the forms before placing the concrete.
8. Pipes and electrical conduits shall not be embedded in structural concrete, except where specifically approved by the structural engineer.
9. Provide sleeves for plumbing and electrical openings in concrete before placing. Do not cut any reinforcing which may interfere. Coring in concrete is not permitted except as shown. Notify the Architect/Engineer in advance of conditions that are not shown on the drawings.
10. Construction joints: Provide as detailed on drawings. Expose clean coarse aggregate solidly embedded in mortar matrix by sandblasting, bushammer, or other approved method. Location of construction joints shall be approved by the Architect/Engineer.
11. Dry pack or place non-shrink grout under base plates, sill plates, etc., as required for full bearing.
12. Reinforcing steel: ASTM A615 Grade 60. ASTM A706 where welded or otherwise indicated.
13. Post tensioning: ASTM A416 Grade 270 seven wire, uncoated, stress-relieved strands.
14. Welded wire fabric: ASTM A1064 (flat sheets only).
15. All reinforcement shall be continuous. Stagger splices where possible. Laps shall be per typical details, unless otherwise noted.
16. Headed terminators shall be HRC 555 T-heads (IAPMO ER-0177) or nVent Lenton Terminators (IAPMO ER-0188).
17. Except as noted Mechanical couplers shall be nVent Lenton Taper Threaded Rebar Splices (IAPMO ER-0129) or Bar-Lock "L" Series Couplers (IAPMO ER-319).
18. Mechanical couplers designated on the drawings as "Type 3" shall be HRC 500/510 XTender couplers (ICC ESR-2764), or nVent Lenton Ultimate couplers (IAPMO ER-0129). These "Type 3" couplers are also acceptable for use in other locations at the Contractor's option.
19. Minimum clear concrete cover for reinforcement, unless otherwise noted:
    - A. Mild Reinforced Concrete:
      - Cast against earth: 3 inches
      - Cast in forms and exposed to earth or weather:
        - #6 bar and larger: 2 inches
        - #5 bar and smaller: 1 1/2 inches
      - Not exposed to earth or weather:
        - Slabs, walls, and joists: 1 inch
        - Beams, girders, and columns (to ties): 1 1/2 inches
    - B. Post Tensioned Concrete:
      - Cast against earth: 3 inches
      - Cast in forms and exposed to earth or weather:
        - Slabs, walls, and joists 1 inch
        - Other members: 1 1/2 inches
      - Not exposed to earth or weather:
        - Slabs, walls, and joists: 3/4 inch
        - Beams, girders, and columns:
        - Primary reinforcement: 1 1/2 inches
        - Ties, stirrups, spirals 1 inch

Clearances are to closest reinforcement.

## ABBREVIATIONS

| | |
|---|---|
| & | And |
| @ | At |
| A.B. | Anchor Bolt |
| ACI | American Concrete Institute |
| ADDTL | Additional |
| AESS | Architectural Exposed Structural Steel |
| AISC | American Institute of Steel Construction |
| ALT. | Alternate |
| APPROX. | Approximate |
| ARCH. | Architect |
| ASD | Allowable Strength Design |
| ASTM | American Society for Testing and Materials |
| AWPA Assoc. | American Wood Preservers |
| AWS | American Welding Society |
| BLK'G | Blocking |
| BM. | Beam |
| B.N. | Boundary Nail |
| BOCA | Building Officials and Code Administrators International, Inc. |
| BOT. | Bottom |
| BRG. | Bearing |
| B.S. | Both Sides |
| BTWN. | Between |
| C | Camber |
| CBC | California Building Code |
| C.C. | Center to Center |
| CCR | California Code of Regulations |
| C.J. | Control Joint |
| C.I.P. | Cast-in-place |
| C.L., CL | Center Line |
| CLG. | Ceiling |
| CLR. | Clear |
| CMU | Concrete Masonry Unit |
| COL. | Column |
| CONC. | Concrete |
| CONN. | Connection |
| CONT. | Continuous |
| CJP | Complete Joint Penetration |
| CSK. | Countersink |
| CTBR. | Counterbore |
| CTR. | Center |
| DBA | Deformed Bar Anchor |
| DBL. | Double |
| DC | Demand Critical (Weld) |
| DET., DTL. | Detail |
| DF | Douglas Fir |
| DIA., Ø | Diameter |
| DIAG. | Diagonal |
| DL | Dead Load |
| DN. | Down |
| DO. | Ditto |
| DSA | Division of the State Architect |
| DWG(S). | Drawing(s) |
| (E) | Existing |
| EA. | Each |
| E.F. | Each Face |
| E.J. | Expansion Joint |
| ELEV.,EL. | Elevation |
| EMB.,EMBED. | Embedment |
| E.N. | Edge Nail |
| EQ. | Equal |
| EQUIP. | Equipment |
| E.S. | Each Side |
| E.W. | Each Way |
| FDN. | Foundation |
| F.F. | Finish Floor |
| F.G. | Finish Grade |
| FIN. | Finish |
| FLR. | Floor |
| F.O.C. | Face of Concrete |
| F.O.M. | Face of Masonry |
| F.O.S. | Face of Stud |
| FRMG. | Framing |
| FRP | Fiber Reinforced Polymer |
| F.S. | Far Side |
| FT. | Foot, Feet |
| FTG. | Footing |
| GA. | Gauge |
| GALV. | Galvanized |
| G.L. | Grid Line |
| GLB | Glued Laminated Beam |
| GR. | Grade |
| HDG | Hot-dip Galvanized |
| HGR. | Hanger |
| HK. | Hook |
| HORIZ. | Horizontal |
| HSB | High Strength Bolt |
| HSS | Hollow Structural Section |
| HT. | Height |
| IBC | International Building Code |
| ICC | International Code Council |
| IN. | Inch, Inches |
| INT. | Interior |
| INV. | Inverted |
| JST. | Joist |
| K | Kips |
| KSI | Kips per Square Inch |
| LABC | Los Angeles Building Code |
| LBS. | Pounds |
| Ld | Development Length |
| LL | Live Load |
| LLH | Long Leg Horizontal |
| LLV | Long Leg Vertical |
| LONG. | Longitudinal |
| Ls | Lap Splice |
| LTWT. | Lightweight |
| LVL | Laminated Veneer Lumber |
| MAX. | Maximum |
| M.B. | Machine Bolt |
| MECH. | Mechanical |
| MFR. | Manufacturer |
| M.I. | Malleable Iron |
| MIL. | 0.001 Inch |
| MIN. | Minimum |
| MISC. | Miscellaneous |
| (N) | New |
| NO., # | Number |
| N.S. | Near Side |
| N.T.S. | Not to Scale |
| NWT. | Normal Weight |
| O.C. | On Center |
| O.D. | Outside Diameter |
| O.H. | Opposite Hand |
| OPNG. | Opening |
| OPP. | Opposite |
| OSHPD | Office of Statewide Health Planning and Development |
| PAF | Powder-Actuated Fasteners |
| PART. | Partial |
| PCF | Pounds per Cubic Foot |
| PL | Plate |
| PLY. | Plywood |
| PP | Partial Penetration |
| PSF | Pounds per Square Foot |
| PSI | Pounds per Square Inch |
| P.T. | Pressure Treated |
| PW | Puddle Weld |
| PWJ | Plywood Web Joists |
| RAD. | Radius |
| R.D. | Roof Drain |
| REINF. | Reinforcing |
| REQ. | Required |
| RF. | Roof |
| R.O. | Rough Opening |
| RND. | Round |
| R.R. | Remove & Replace |
| S.A.D. | See Architectural Drawings |
| SCHED. | Schedule |
| SFBC | San Francisco Building Code |
| SFRS | Seismic Force Resisting System |
| SHT. | Sheet |
| SHTG. | Sheathing |
| SIM. | Similar |
| SLRS | Seismic Load Resisting System |
| S.M.D. | See Mechanical Drawings |
| S.O.G. | Slab on Grade |
| S.P. | Southern Pine |
| S.S. | Stainless Steel |
| STAG'D.,STG. | Staggered |
| STD. | Standard |
| STIFF. | Stiffener |
| STL. | Steel |
| STRUCT. | Structural |
| SYMM.,SYM. | Symmetrical |
| T&B | Top and Bottom |
| T&G | Tongue & Groove |
| T.N. | Toe Nail |
| T.O.C. | Top of Concrete |
| T.O.S. | Top of Steel |
| T.O.W. | Top of Wall |
| TS | Tube Steel (Hollow Structural Section) |
| TYP. | Typical |
| U.O.N. | Unless Otherwise Noted |
| VERT. | Vertical |
| V.I.F., ± | Verify in Field |
| W/ | With |
| W/O | Without |
| WCLIB | West Coast Lumber Inspection Bureau |
| W.P. | Work Point |
| WHS | Welded Headed Stud |
| WTS | Welded Threaded Stud |
| WWR | Welded Wire Reinforcing |
| WWPA | Western Wood Products Association |

## GENERAL SYMBOLS AND LEGEND




- REVISION
- GRIDLINE
- BUILDING SECTION OR ELEVATION
- WORK POINT, DATUM OR CONTROL POINT, FIN. FLR. ELEVATION, S.A.D.
- DETAIL REFERENCE
- PROJECT NORTH, S.A.D. FOR TRUE NORTH

| Revisions: | Date: |
|---|---|
| BID SET | 05/04/2026 |

CONSULTANT

SIMPSON GUMPERTZ & HEGER
757 S ALAMEDA ST, SUITE 440
LOS ANGELES, CA 90021
213-271-2000

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

STAMP

REGISTERED PROFESSIONAL ENGINEER JAMES McDONALD No. S 4766 STRUCTURAL STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: GENERAL NOTES

Approved: Approver

Phase: BID SET

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026 | Checked: SGH | Drawn: SGH

Project Number: 570-20-308

Building Number: 1

Drawing Number: S-001

VA FORM 08 - 6231

C:\Users\ltchang\Documents\Revit\2023\228124_CHIL_SE_R23_ltchang.rvt

5/1/2026 3:44:13 PM

| BAR SIZE | DEVELOPMENT LENGTH INCHES ($l_d$) | | | | | | | | LAP SPLICE LENGTH INCHES | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOP BARS | | | | OTHER BARS | | | | TOP BARS | | | | OTHER BARS | | | |
| | 3000 PSI | 4000 PSI | 5000 PSI | 6000 PSI | 3000 PSI | 4000 PSI | 5000 PSI | 6000 PSI | 3000 PSI | 4000 PSI | 5000 PSI | 6000 PSI | 3000 PSI | 4000 PSI | 5000 PSI | 6000 PSI |
| #3 | 22 | 19 | 17 | 16 | 17 | 15 | 13 | 12 | 29 | 25 | 23 | 20 | 23 | 20 | 17 | 16 |
| #4 | 29 | 25 | 23 | 21 | 22 | 19 | 17 | 16 | 38 | 33 | 30 | 27 | 29 | 25 | 23 | 21 |
| #5 | 36 | 31 | 28 | 26 | 28 | 24 | 22 | 20 | 47 | 41 | 37 | 33 | 37 | 32 | 29 | 26 |
| #6 | 43 | 37 | 34 | 31 | 33 | 29 | 26 | 24 | 56 | 49 | 45 | 40 | 43 | 38 | 34 | 31 |
| #7 | 63 | 54 | 49 | 45 | 48 | 42 | 38 | 34 | 82 | 71 | 64 | 58 | 63 | 55 | 50 | 45 |
| #8 | 72 | 62 | 56 | 51 | 55 | 48 | 43 | 39 | 94 | 81 | 73 | 66 | 72 | 63 | 56 | 51 |
| #9 | 81 | 70 | 63 | 57 | 62 | 54 | 48 | 44 | 106 | 91 | 82 | 74 | 81 | 71 | 63 | 57 |
| #10 | 91 | 79 | 71 | 64 | 70 | 61 | 54 | 50 | 119 | 103 | 93 | 84 | 91 | 80 | 71 | 64 |
| #11 | 101 | 87 | 78 | 71 | 78 | 67 | 60 | 55 | 132 | 114 | 102 | 93 | 102 | 88 | 78 | 71 |

DEVELOPMENT

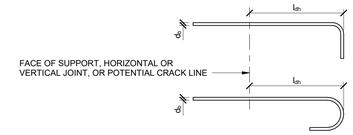
LAP SPLICE

NOTES:
1. REFER TO HOOKED REINFORCEMENT TENSION DEVELOPMENT LENGTH SCHEDULE IN CONCRETE WHEN THE STRAIGHT DEVELOPMENT LENGTH IN TENSION CANNOT BE ACCOMMODATED IN THE CONCRETE SECTION.
2. TABULATED DEVELOPMENT LENGTHS ARE BASED ON REINFORCING STEEL YIELD STRENGTH $F_y$=60 KSI AND NORMAL WEIGHT CONCRETE.
3. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12 INCHES OF FRESH CONCRETE CAST IN THE MEMBER BELOW THE BARS TO BE DEVELOPED OR SPLICED. THE TOP BAR FACTOR DOES NOT APPLY TO BARS IN WALLS.
4. WHEN BARS OF DIFFERENT SIZE ARE LAP SPLICED IN TENSION, SPLICE LENGTH SHALL BE THE LARGER OF $l_d$ OF THE LARGER BAR AND LAP SPLICE LENGTH OF THE SMALLER BAR.
5. ALL TABULATED VALUES ARE MINIMUM LENGTHS, IN CASE OF CONFLICT WITH PLANS, SECTIONS, OR DETAILS, USE THE LONGER LENGTH.
6. $d_b$ = BAR DIAMETER.
7. $l_d$ = DEVELOPMENT LENGTH.
8. MULTIPLY TABULATED LENGTHS BY THE FOLLOWING FACTORS WHERE APPLICABLE. NOTE THAT FACTORS ARE CUMULATIVE: (E.G. 1.33x1.50 = 2.0)
   A. LIGHT WEIGHT CONCRETE: 1.33
   B. 3 BUNDLED BARS: 1.20
   C. 4 BUNDLED BARS: 1.33
   D. CLEAR SPACING LESS THAN $2d_b$ AND CLEAR COVER LESS THAN $d_b$: 1.50
   E. EPOXY COATED BARS: 1.50
9. USE MECHANICAL COUPLERS FOR #14 AND LARGER BARS.
10. FOR LAP SPLICES IN CONCRETE MASONRY, SEE MASONRY REINFORCEMENT DETAILS.

## 1 STRAIGHT REINFORCEMENT DEVELOPMENT AND LAP SPLICE LENGTH SCHEDULE FOR CONCRETE

NTS

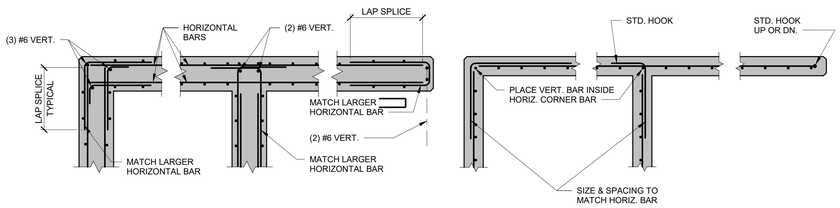
| BAR SIZE | TENSION DEVELOPMENT LENGTH FOR HOOKED BARS ($l_{dh}$) INCHES | | | |
|---|---|---|---|---|
| | 3000 PSI | 4000 PSI | 5000 PSI | 6000 PSI |
| #3 | 9 | 8 | 7 | 6 |
| #4 | 11 | 10 | 9 | 8 |
| #5 | 14 | 12 | 11 | 10 |
| #6 | 17 | 15 | 13 | 12 |
| #7 | 20 | 17 | 15 | 15 |
| #8 | 22 | 19 | 17 | 18 |
| #9 | 25 | 23 | 22 | 22 |
| #10 | 29 | 27 | 26 | 26 |
| #11 | 34 | 32 | 31 | 30 |




NOTES:
1. SEE TYPICAL REINFORCEMENT BEND DETAIL FOR ADDITIONAL INFORMATION.
2. TABULATED DEVELOPMENT LENGTHS ARE BASED ON REINFORCING STEEL YIELD STRENGTH ($F_y$=60 KSI) AND NORMAL WEIGHT CONCRETE.
3. ALL TABULATED VALUES ARE MINIMUM LENGTHS. IN CASE OF CONFLICT WITH THE PLANS, SECTIONS, OR DETAILS, USE THE LONGER LENGTH.
4. $d_b$=BAR DIAMETER
5. $l_{dh}$ =TENSION DEVELOPMENT LENGTH (HOOK BARS)
6. ADJUST TABULATED LENGTHS BY THE FOLLOWING MULTIPLICATION FACTORS WHERE APPLICABLE. NOTE THAT THE FACTORS ARE CUMULATIVE: (e.g. 1.33 x 1.20 = 1.60)
   A. REINFORCING BAR STRENGTH OTHER THAN 60 KSI: ($F_y$/60,000)
   B. LIGHT WEIGHT CONCRETE: 1.33
   C. EPOXY COATED BARS: 1.20

## 4 HOOKED REINFORCEMENT DEVELOPMENT LENGTH SCHEDULE FOR CONCRETE

NTS

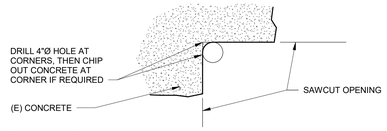



DOUBLE CURTAIN

SINGLE CURTAIN

## 6 WALL AND BEAM STEM REINFORCEMENT DETAILS

NTS



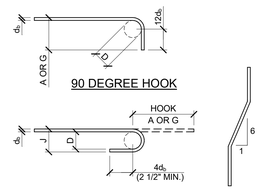

TYPICAL CORNER

1. DRILL 4"Ø HOLE TANGENT TO LINES OF FINISHED OPENING AT EACH CORNER.
2. SAWCUT TO LINES REQUIRED. DO NOT OVER-RUN AT CORNERS.
3. CHIP REMAINING CORNER CONCRETE WITH GREAT CARE AND SMALL TOOLS.
4. AT OPENINGS NOT EXPOSED TO PUBLIC VIEW, THE ENDS OF ALL EXISTING CUT REINFORCING SHALL BE COATED WITH A HEAVY COAT OF ASPHALTIC PAINT.
5. AT OPENINGS EXPOSED TO PUBLIC VIEW, THE ENDS OF ALL EXISTING CUT REINFORCING SHALL BE BURNED OFF 1" BACK FROM FACE OF CONCRETE. PATCH HOLES AS FOR FORM TIES.

## 8 SAWCUTTING OF EXISTING CONCRETE

NTS

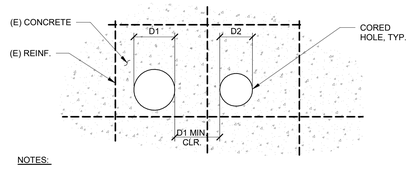
| BAR SIZE | BEND DIAMETER (D) INCHES | 180°HOOKS | | 90° HOOKS |
|---|---|---|---|---|
| | | A OR G INCHES | J INCHES | A OR G INCHES |
| #3 | $2^1/_4$ | 5 | 3 | 6 |
| #4 | 3 | 6 | 4 | 8 |
| #5 | $3^3/_4$ | 7 | 5 | 10 |
| #6 | $4^1/_2$ | 8 | 6 | 12 |
| #7 | $5^1/_4$ | 10 | 7 | 14 |
| #8 | 6 | 11 | 8 | 16 |
| #9 | $9^1/_2$ | 15 | $11^3/_4$ | 19 |
| #10 | $10^3/_4$ | 17 | $13^1/_4$ | 22 |
| #11 | 12 | 19 | $14^3/_4$ | 24 |




NOTES:
1. ALL BENDS SHALL BE MADE COLD AND SHALL BE MADE PRIOR TO PARTIAL EMBEDMENT IN CONCRETE.
2. $d_b$ = BAR DIAMETER.
3. D = BEND DIAMETER, MEASURED ON THE INSIDE OF BAR.

## 9 TYPICAL REINFORCEMENT BENDS FOR CONCRETE AND MASONRY

NTS

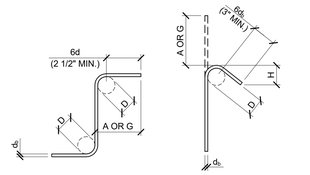



NOTES:
1. CORED HOLES WITH A MAXIMUM DIAMETER OF 9 INCHES ARE PERMITTED, AS LIMITED BY THIS DETAIL, WITHOUT FURTHER APPROVAL. FOR LARGER CORED HOLES, CONTACT ARCHITECT/ENGINEER PRIOR TO PROCEEDING.
2. MARK THE LOCATION OF ALL REINFORCING IN THE EXISTING CONCRETE WITHIN 12" OF THE PROPOSED LOCATIONS OF ALL CORES THROUGH EXISTING CONCRETE. NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS DISCOVERED BETWEEN THE PROPOSED CORE LOCATIONS AND THE EXISTING REINFORCING PRIOR TO ANY HOLE CORING, SO AS TO AVOID DISTURBING, CUTTING, OR OTHERWISE HARMING THE EXISTING REINFORCING WITHOUT PRIOR REVIEW AND APPROVAL.
3. WHERE CORING OR CUTTING THROUGH REINFORCING BARS IS APPROVED, APPLY SIKA ARMATEC 110 EPOCEM TO EXPOSED CUT ENDS OF BARS.

## 13 CORED HOLES IN EXISTING CONCRETE

NTS

| BAR SIZE | BEND DIAMETER (D) INCHES | 90° HOOK | 135° HOOKS | |
|---|---|---|---|---|
| | | A OR G INCHES | A OR G INCHES | H (APPROX.) INCHES |
| #3 | $1^1/_2$ | 4 | $4^1/_4$ | 3 |
| #4 | 2 | $4^1/_2$ | $4^1/_2$ | 3 |
| #5 | $2^1/_2$ | 6 | $5^1/_2$ | $3^3/_4$ |




90 DEGREE HOOK

135 DEGREE HOOK

NOTES:
1. ALL BENDS SHALL BE MADE COLD AND SHALL BE MADE PRIOR TO PARTIAL EMBEDMENT IN CONCRETE.
2. $d_b$ = BAR DIAMETER.
3. D = BEND DIAMETER, MEASURED ON THE INSIDE OF BAR.

## 14 TYPICAL TIE AND STIRRUP HOOKS FOR CONCRETE AND MASONRY

NTS

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

SIMPSON GUMPERTZ & HEGER
757 S ALAMEDA ST, SUITE 440
LOS ANGELES, CA 90021
213-271-2000

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

STAMP

REGISTERED PROFESSIONAL ENGINEER JAMES McDONALD No. S 4766 STRUCTURAL STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

| Drawing Title | Phase | Project Title | Project Number |
|---|---|---|---|
| TYPICAL CONCRETE DETAILS | BID SET | REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC | 570-20-308 |
| Approved: Approver | - | Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703 | Building Number: 1 |
| | | Issue Date: 05/04/2026 · Checked: SGH · Drawn: SGH | Drawing Number: S-030 |

VA FORM 08 - 6231

5/1/2026 3:44:14 PM

C:\Users\ttchang\Documents\Revit\2023\228124_CHIL_SE_R23_ttchang.rvt

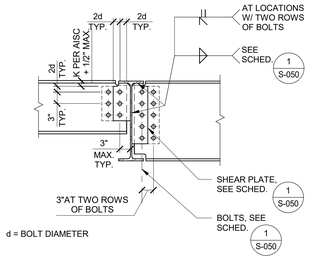
| BEAM SIZE | BOLTS NO. | BOLTS DIA. | WEB PL THICK | WELD SIZE, "A" | LRFD DESIGN STRENGTH |
|---|---|---|---|---|---|
| W8, W10, C8, C10 | 2 | 3/4" | 1/4" | 3/16" | 25.1 KIPS |
| W12, W14, C12 | 3 | 3/4" | 3/8" | 1/4" | 44.2 KIPS |
| W16 | 4 | 3/4" | 3/8" | 1/4" | 63.3 KIPS |
| W18, W21 | 5 | 3/4" | 3/8" | 1/4" | 82.0 KIPS |
| W24 (NOTE 1) | 6 | 3/4" | 3/8" | 1/4" | 100 KIPS |
| W27 (NOTE 1) | 7 | 3/4" | 3/8" | 1/4" | 119 KIPS |
| W30 (NOTE 1) | 8 | 3/4" | 3/8" | 1/4" | 137 KIPS |
| W33, W36 (NOTE 1) | 9 | 3/4" | 3/8" | 1/4" | 155 KIPS |

NOTES:

1. SHORT SLOTTED HOLES ARE REQUIRED PER AISC 360-16 FOR BEAMS W24 AND LARGER.
2. DESIGN STRENGTHS ARE BASED ON ASTM F3125 GRADE A325 BOLTS, WITH THREADS INCLUDED IN THE SHEAR PLANE, AS INDICATED IN TABLE 10-10b OF THE AISC STEEL CONSTRUCTION MANUAL, 15th EDITION.
3. DESIGN STRENGTHS ARE APPLICABLE FOR INDICATED BOLT DIAMETER AND GRADE 50 PLATE MATERIAL.
4. DESIGN STRENGTHS ARE NOT APPLICABLE TO HSS CONNECTIONS.

SGHRTLA00 1 SCHEDULE OF BEAM CONNECTIONS
SINGLE SHEAR PLATE - 3/4" BOLTS

NTS




SDET-01 2 BEAM TO GIRDER SIMPLE CONNECTION

NTS

| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

SIMPSON GUMPERTZ & HEGER
757 S ALAMEDA ST, SUITE 440
LOS ANGELES, CA 90021
213-271-2000

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER
JAMES McDONALD
No. S 4766
STRUCTURAL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: TYPICAL STEEL DETAILS

Approved: Approver

Phase: BID SET

-

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Location: FRESNO VA HOSPITAL
2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026
Checked: SGH
Drawn: SGH

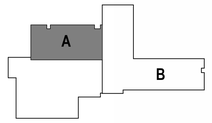
Project Number: 570-20-308
Building Number: 1
Drawing Number: S-050

VA FORM 08 - 6231

C:\Users\ltching\Documents\Revit\2023\228124_CHIL_SE_R23_ltching.rvt

5/1/2026 3:44:14 PM

1 BASEMENT STRUCTURAL PLAN - AREA A
1/8" = 1'-0"




| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

SIMPSON GUMPERTZ & HEGER
757 S ALAMEDA ST, SUITE 440
LOS ANGELES, CA 90021
213-271-2000

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER
JAMES McDONALD
No. S 4766
STRUCTURAL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BASEMENT STRUCTURAL PLAN - AREA A

Approved: Approver

Phase: BID SET

-

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Location: FRESNO VA HOSPITAL
2615 E CLINTON AVE, FRESNO, CA 93703

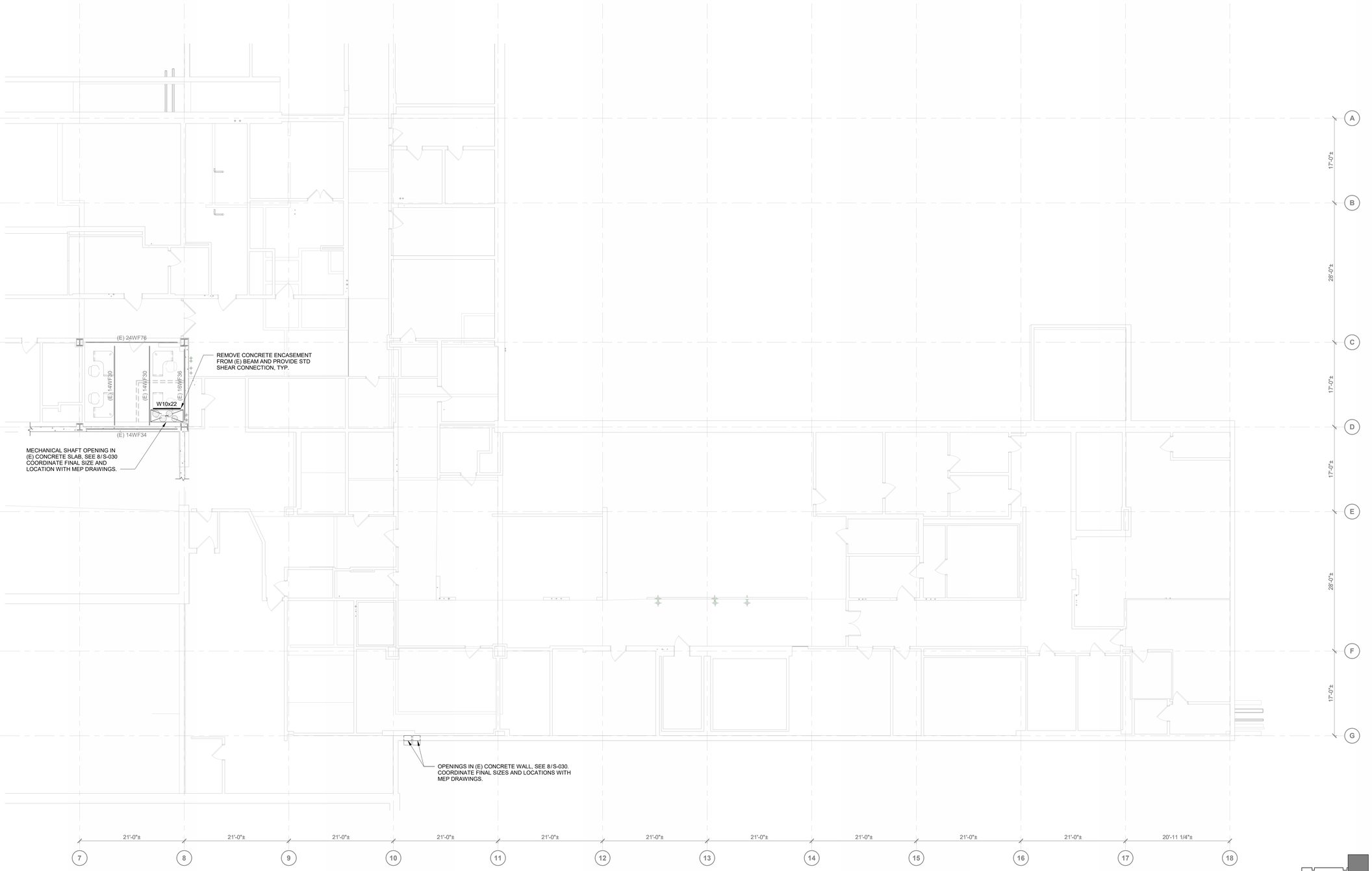
Issue Date: 05/04/2026
Checked: SGH
Drawn: SGH

Project Number: 570-20-308
Building Number: 1
Drawing Number: S-102A

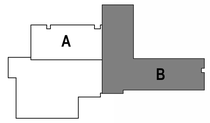
VA FORM 08 - 6231

C:\Users\tchang\Documents\Revit\2023\230104_CHIL_SE_R23_tomchang.rvt

5/1/2026 3:44:17 PM




1 BASEMENT STRUCTURAL PLAN
1/8" = 1'-0"




| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

SIMPSON GUMPERTZ & HEGER
757 S ALAMEDA ST, SUITE 440
LOS ANGELES, CA 90021
213-271-2000

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

STAMP

REGISTERED PROFESSIONAL ENGINEER JAMES McDONALD No. S 4766 STRUCTURAL STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BASEMENT STRUCTURAL PLAN - AREA B

Approved: Approver

Phase: BID SET

-

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026

Checked: SGH

Drawn: SGH

Project Number: 570-20-308

Building Number: 1

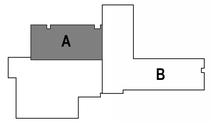
Drawing Number: S-102B

VA FORM 08 - 6231

5/1/2026 3:44:21 PM

C:\Users\tchang\Documents\Revit\2023\228104_CHIL_SE_R23_tomchang.rvt

1 FIRST FLOOR STRUCTURAL PLAN - AREA A
1/8" = 1'-0"




| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

SIMPSON GUMPERTZ & HEGER
757 S ALAMEDA ST, SUITE 440
LOS ANGELES, CA 90021
213-271-2000

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

STAMP

REGISTERED PROFESSIONAL ENGINEER JAMES McDONALD No. S 4766 STRUCTURAL STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRST FLOOR STRUCTURAL PLAN - AREA A

Approved: Approver

Phase: BID SET

-

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026

Checked: SGH

Drawn: SGH

Project Number: 570-20-308

Building Number: 1

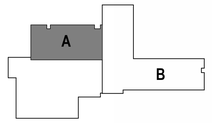
Drawing Number: S-103A

VA FORM 08 - 6231

C:\Users\tchang\Documents\Revit\2023\228104_CHIL_SE_R23_tomchang.rvt

5/1/2026 3:44:25 PM

1 SECOND FLOOR STRUCTURAL PLAN - AREA A
1/8" = 1'-0"




| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

**CONSULTANT**

SIMPSON GUMPERTZ & HEGER
757 S ALAMEDA ST, SUITE 440
LOS ANGELES, CA 90021
213-271-2000

**DESIGNER OF RECORD**

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

**STAMP**

REGISTERED PROFESSIONAL ENGINEER
JAMES McDONALD
No. S 4766
STRUCTURAL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

**Drawing Title**
SECOND FLOOR STRUCTURAL PLAN - AREA A

**Approved:** Approver

**Phase**
BID SET

-

**Project Title**
REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

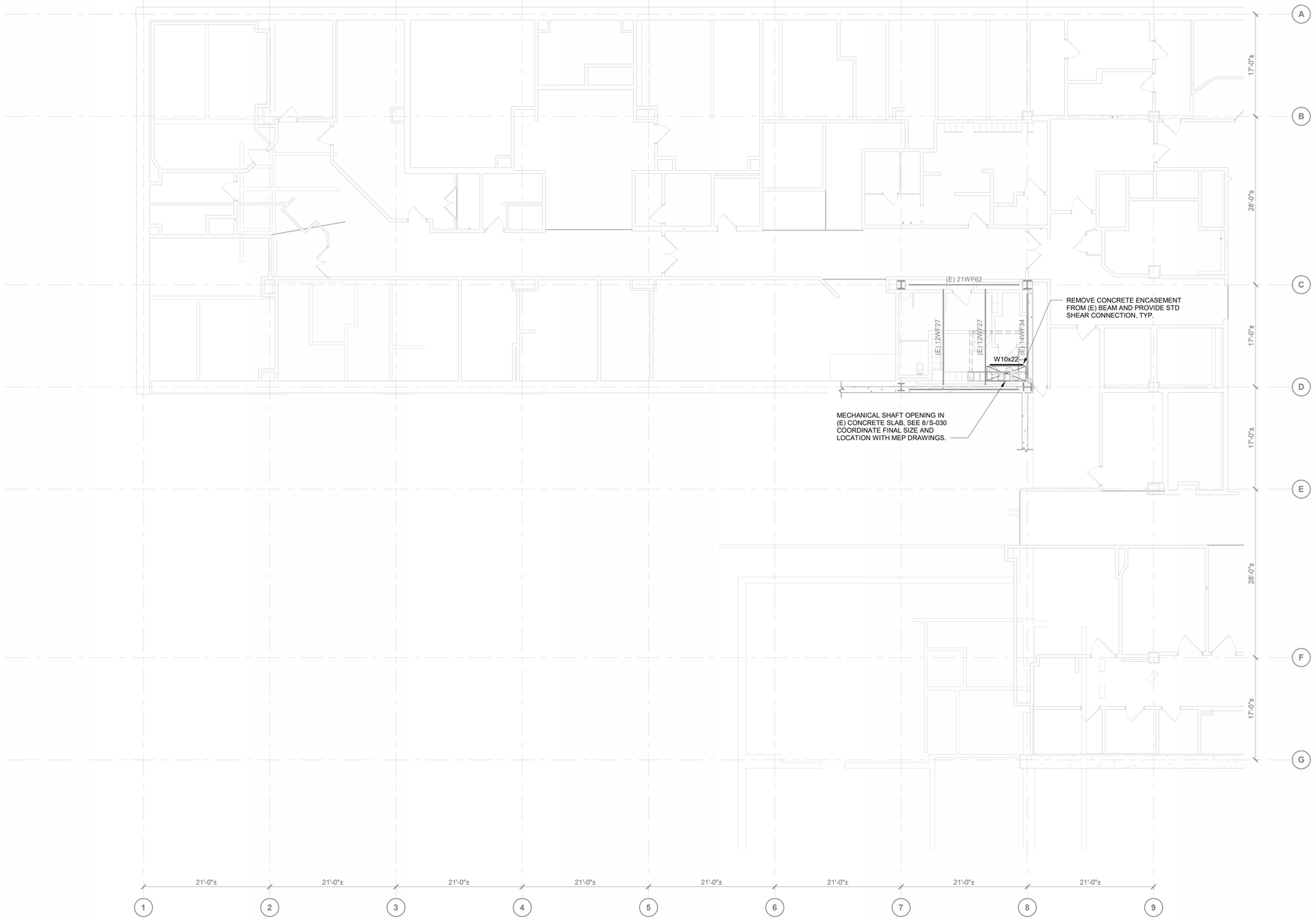
**Location**
FRESNO VA HOSPITAL
2615 E CLINTON AVE, FRESNO, CA 93703

**Issue Date** 05/04/2026
**Checked** SGH
**Drawn** SGH

**Project Number** 570-20-308
**Building Number** 1
**Drawing Number** S-104A

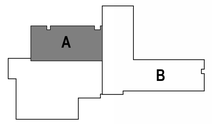
VA FORM 08 - 6231

5/1/2026 3:44:28 PM
C:\Users\tchang\Documents\Revit\2023\228104_CHIL_SE_R23_tomchang.rvt




1 THIRD FLOOR STRUCTURAL PLAN - AREA A

1/8" = 1'-0"




| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

SIMPSON GUMPERTZ & HEGER
757 S ALAMEDA ST, SUITE 440
LOS ANGELES, CA 90021
213-271-2000

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

STAMP

REGISTERED PROFESSIONAL ENGINEER
JAMES McDONALD
No. S 4766
STRUCTURAL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: THIRD FLOOR STRUCTURAL PLAN - AREA A

Approved: Approver

Phase: BID SET

-

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026

Checked: SGH

Drawn: SGH

Project Number: 570-20-308

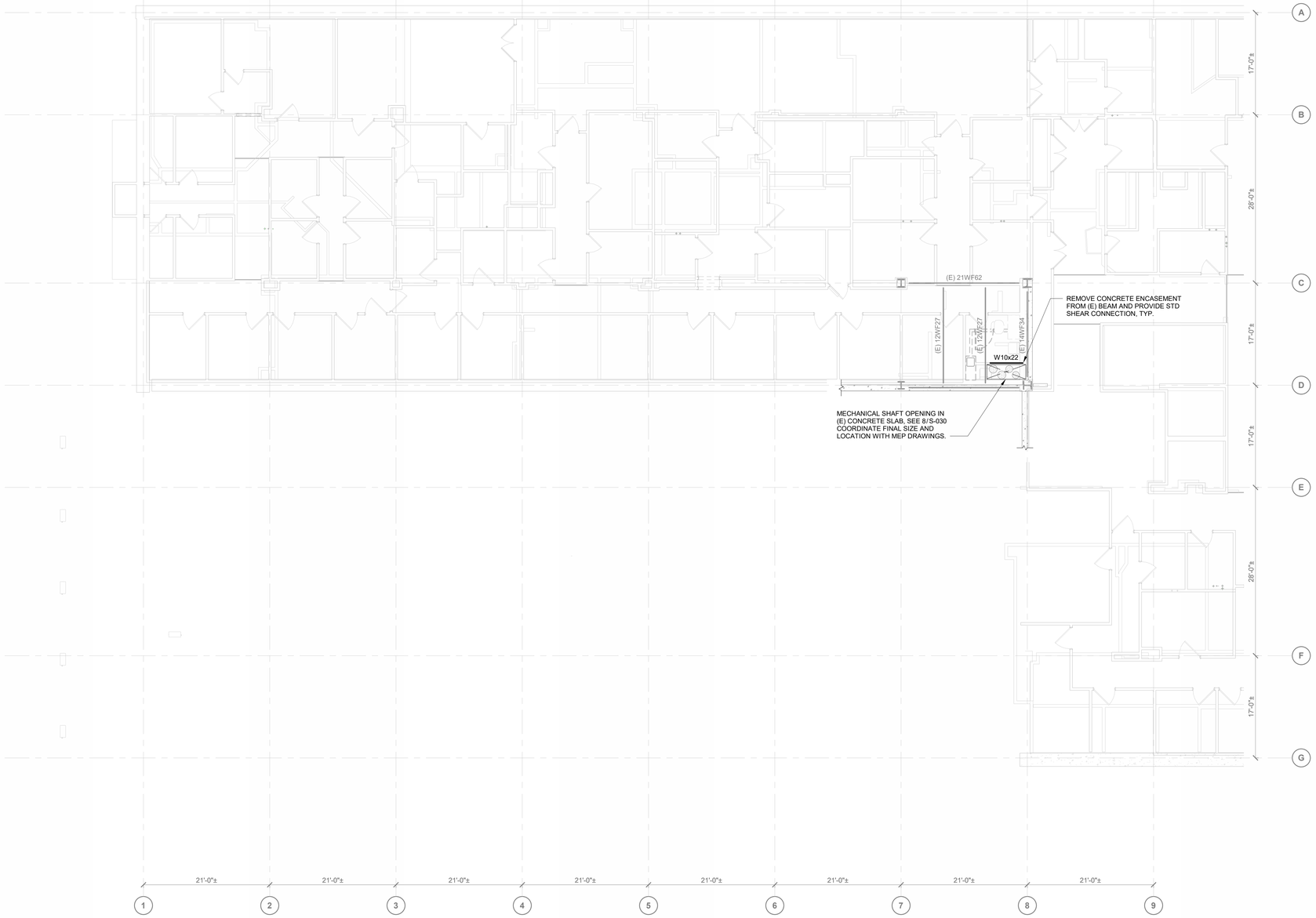
Building Number: 1

Drawing Number: S-105A

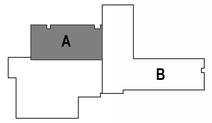
C:\Users\ltchang\Documents\Revit\2023\228124_CHIL_SE_R23_ltchang.rvt

5/1/2026 3:44:31 PM

VA FORM 08 - 6231




1 FOURTH FLOOR STRUCTURAL PLAN - AREA A
1/8" = 1'-0"




| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

SIMPSON GUMPERTZ & HEGER
757 S ALAMEDA ST, SUITE 440
LOS ANGELES, CA 90021
213-271-2000

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

DAVENERGY SOLUTIONS
ENGINEERING | CONSTRUCTION MANAGEMENT

STAMP

REGISTERED PROFESSIONAL ENGINEER
JAMES McDONALD
No. S 4766
STRUCTURAL
STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FOURTH FLOOR STRUCTURAL PLAN - AREA A

Approved: Approver

Phase: BID SET

-

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026

Checked: SGH

Drawn: SGH

Project Number: 570-20-308

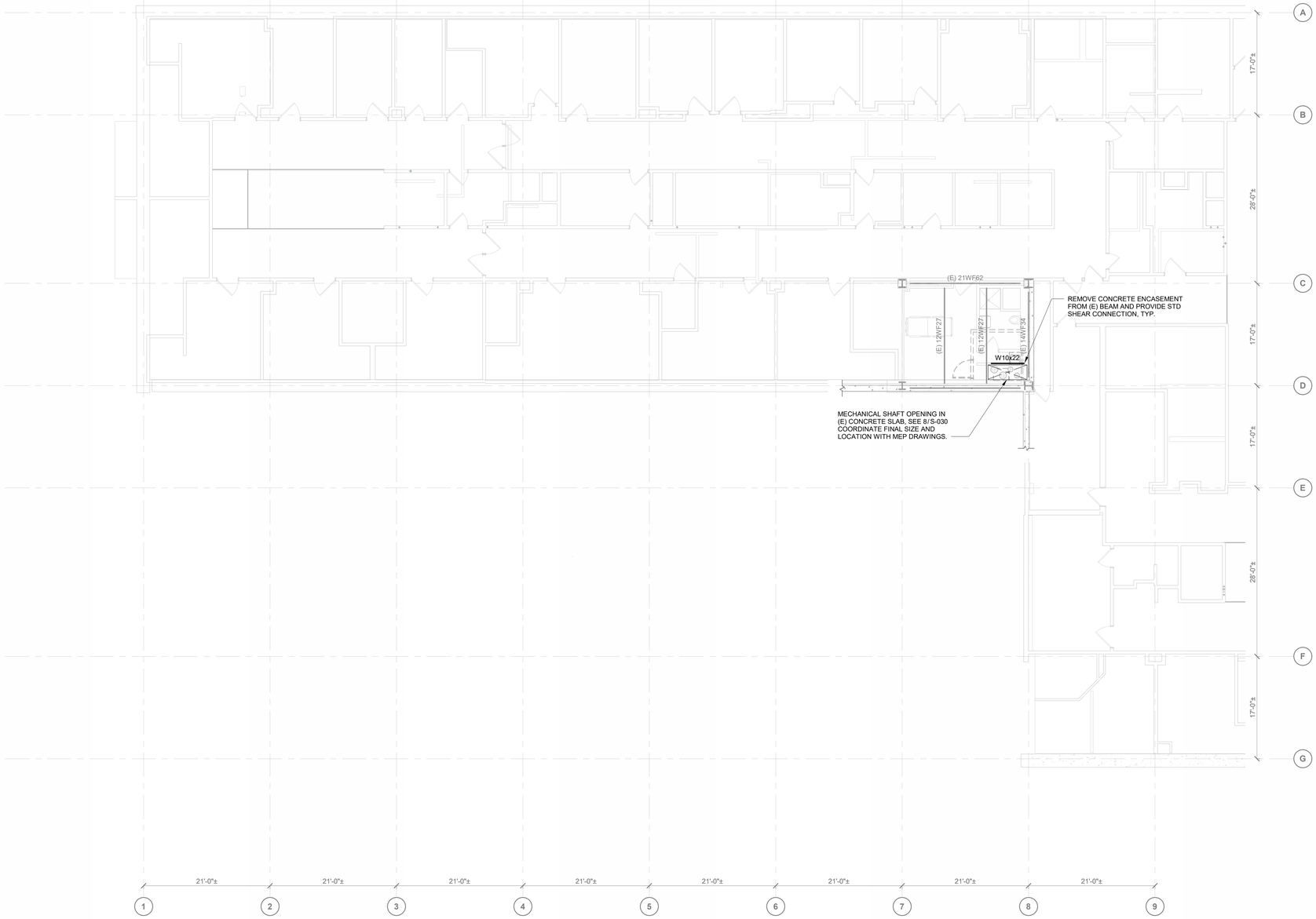
Building Number: 1

Drawing Number: S-106A

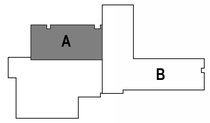
VA FORM 08 - 6231

5/1/2026 3:44:34 PM

C:\Users\tchang\Documents\Revit\2023\23281\24_CHIL_SE_R23_tomchang.rvt




1 FIFTH FLOOR STRUCTURAL PLAN - AREA A
1/8" = 1'-0"




| | |
|---|---|
| BID SET | 05/04/2026 |
| Revisions: | Date: |

CONSULTANT

SIMPSON GUMPERTZ & HEGER
757 S ALAMEDA ST, SUITE 440
LOS ANGELES, CA 90021
213-271-2000

DESIGNER OF RECORD

A/E:
DAVENERGY SOLUTIONS
2207 GARNET AVE, SUITE I
SAN DIEGO, CA 92109
619-770-8552

STAMP

REGISTERED PROFESSIONAL ENGINEER JAMES McDONALD No. S 4766 STRUCTURAL STATE OF CALIFORNIA

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIFTH FLOOR STRUCTURAL PLAN - AREA A

Approved: Approver

Phase: BID SET

-

Project Title: REPLACE AND EXPAND CHILLED WATER INFRASTRUCTURE, BUILDING 1 AND OPC

Location: FRESNO VA HOSPITAL, 2615 E CLINTON AVE, FRESNO, CA 93703

Issue Date: 05/04/2026

Checked: SGH

Drawn: SGH

Project Number: 570-20-308

Building Number: 1

Drawing Number: S-107A

VA FORM 08 - 6231

5/1/2026 3:44:38 PM

C:\Users\tchang\Documents\Revit\2023\228104_CHIL_SE_R23_tomchang.rvt