

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 one quarter inch = one foot
 three eighths inch = one foot
 one eighth inch = one foot

LIST OF CODES AND STANDARDS MODEL CODE EDITIONS EFFECTIVE JANUARY 1, 2014

2013 CA. BUILDING CODE *TITLE 24 PART 2 VOLUME #1 AND #2
 2013 CA. ELECTRIC CODE * TITLE 24 PART 3.
 2013 CA. MECHANICAL CODE * TITLE 24 PART 4.
 2013 CA. PLUMBING CODE * TITLE 24 PART 5.
 2013 CA. FIRE CODE * TITLE 24 PART 9.
 2013 CA. BUILDING STANDARDS * TITLE 24 PART 12.

LIST OF STANDARDS CURRENTLY ADAPTED BY THE STATE OF CALIFORNIA, SEE CBC CHAPTER 35 AND CFC CHAPTER 47. CURRENT REFERENCE STANDARDS APPLICABLE TO FIRE AND LIFE SAFETY, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

2013 NFPA 10 PORTABLE FIRE EXTINGUISHERS
 2013 NFPA 13 INSTALLATION OF FIRE SPRINKLER SYSTEMS + CA. AMENDMENTS
 2013 NFPA 14 INSTALLATION OF STANDPIPE, PRIVATE HYDRANT AND HOSE STATIONS.
 2013 NFPA 72 NATIONAL FIRE ALARM CODE - SEE CALIFORNIA AMENDMENTS
 2013 NFPA 20 INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION.
 2013 NFPA 22 WATER TANKS FOR PRIVATE FIRE PROTECTION
 2013 NFPA 24 INSTALLATION OF PRIVATE FIRE SERVICE MAINS + CA. AMENDMENTS
 2013 NFPA 80 FIRE DOORS AND OTHER OPENING PROTECTIVE
 2013 NFPA 110 EMERGENCY AND STANDBY POWER SYSTEMS
 2012 NFPA 2001 CLEAN AGENT FIRE EXTINGUISHING SYSTEMS
 TITLE 19 CCR STATE FIRE MARSHAL REGULATIONS

FIRE SPRINKLER SYSTEM GENERAL PLAN REVIEW NOTES:

1. WATER SUPPLY COMPONENTS, SUCH AS WATER TANKS, FIRE PUMPS, ETC., ALONG WITH THE ORIGINAL WATER SUPPLY TESTING DATE.
2. 2013 NFPA 13 SEC. 8.16.4.1: THE DESIGNER SHALL INDICATE ON THE PLANS ALL PIPING SUBJECT TO FREEZING (WHERE WATER TEMPERATURE CAN NOT BE MAINTAINED ABOVE 40 ° FAHRENHEIT) AND PROVIDE APPROVED PROTECTION.
3. 2013 NFPA 13 SEC. 10.10.2.1: UNDERGROUND MAINS AND LEAD-IN CONNECTIONS TO SYSTEM RISERS SHALL BE COMPLETELY FLUSHED BEFORE CONNECTION IS MADE TO OVERHEAD SPRINKLER PIPING. WHERE UNDERGROUND CONNECTION IS FLUSHED AND NOT IMMEDIATELY CONNECTED TO THE OVERHEAD PIPING, THE RISER SHALL BE CAPPED OR OTHERWISE PROTECTED TO PREVENT DEBRIS, DIRT, OR ANIMALS FROM ENTERING INTO THE UNDERGROUND PIPING. (WITNESSED BY PROJECT INSP.)
4. PROVIDE WET SIGNED WATER FLOW TEST DATA NO MORE THAN 6 MONTH OLD AND INDICATE THE LOCATIONS AND HEIGHT ELEVATIONS OF THE TEST AND RESIDUAL FLOW HYDRANTS. WATER FLOW TEST DATA MUST BE PROVIDED BY OR WITNESSED BY THE LOCAL WATER PURVEYOR, UTILITY COMPANY OR LOCAL FIRE DEPARTMENT.
5. 2013 NFPA 13 SEC. 10.10.2.2: ALL PIPING AND ATTACHED APPURTENANCES SUBJECT TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE WITHOUT LOSS FOR 2 HOURS. (WITNESSED BY PROJECT INSPECTOR)
6. 2013 NFPA 13 SEC. 6.2.9.5: PROVIDED SPARE SPRINKLER HEAD CABINET, SPRINKLER WRENCH AND NO FEWER THAN 6 SPARE SPRINKLER HEADS MATCHING THE TYPES AND TEMPERATURE RATING IN EACH PROTECTED AREA FOR SYSTEMS LESS THAN 300 SPRINKLERS. (12 SPARE SPRINKLER HEADS FOR SYSTEMS 300 TO 1000 SPRINKLERS)
7. 2013 NFPA 13 SEC. 9.3.6.3: THE END SPRINKLER ON EACH LINE SHALL BE RESTRAINED AGAINST EXCESSIVE VERTICAL AND LATERAL MOVEMENT.
8. 2013 NFPA 13 SEC. 8.17.4.2.1 - 8.16.4.2.3: THE INSPECTORS TEST PIPE SIZE SHALL BE NO LESS THAN 1 INCH WITH A SMOOTH BORE CORROSION-RESISTANT ORIFICE PROVIDING THE EQUIVALENT FLOW OF THE SMALLEST ORIFICE OF THE SPRINKLER TYPES INSTALLED WITHIN THE SYSTEM. THE DISCHARGE SHALL BE TO THE EXTERIOR OF THE BUILDING.
9. 2013 NFPA 17.12.2: THE SPRINKLER FLOW SWITCH SHALL BE TESTED TO CONFIRM THAT WHEN THE INSPECTORS TEST VALVE IS ACTIVATED, AN ALARM WILL SOUND NO MORE THAN 90 SECONDS AFTER INITIAL FLOW. (WITNESSED BY PROJECT INSPECTOR).
10. 2013 CFC CHAPTER 5 sec. 509.1: SIGNAGE SHALL BE PROVIDED AS REQUIRED, INDICATING "RISER ROOM IDENTIFICATION".
11. 2013 CBC SEC. 903.4.1: THE MAIN FIRE ALARM PANEL VALVE MONITORING AND WATER FLOW ALARM AND TROUBLE SIGNALS SHALL BE DISTINCTLY DIFFERENT AND SHALL BE AUTOMATICALLY TRANSMITTED TO AN APPROVED CENTRAL STATION MONITORING COMPANY.
12. 2013 NFPA 25 SEC. 5.2.6: A PERMANENT HYDRAULIC CALCULATIONS DESIGN DATA PLACARD SHALL BE ATTACHED TO EACH RISER.
13. 2013 NFPA 13 CHAPTER 25 sec. 25.1: SPRINKLER CONTRACTOR SHALL COMPLETE AND SIGN CONTRACTOR'S MATERIAL & TEST CERTIFICATE FOR THE ABOVEGROUND PIPING. THIS FORM SHALL BE GIVEN TO THE PROJECT INSPECTOR WHO WILL FOREWORD TO DSA FOR FILING IN PROJECT RECORDS.

GENERAL NOTES FOR OVERHEAD FIRE SPRINKLERS:

NFPA 13 (2013) SEC. 10.10.2.1 UNDERGROUND MAINS AND LEAD IN CONNECTIONS TO SYSTEM RISERS SHALL BE COMPLETELY FLUSHED BEFORE CONNECTION IS MADE TO OVERHEAD SPRINKLER SYSTEM PIPING. (WITNESSED BY THE INSPECTOR OF RECORD).

NFPA 13 (2013) SEC. 9.3.4.2 CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING EXTENDING THROUGH WALLS, FLOORS, PLATFORMS AND FOUNDATIONS, INCLUDING DRAINS SUCH THAT THE DIAMETER OF THE HOLES IS 2" AND LARGER THAN THE PIPE FROM 1" TO 3.5" AND 4 INCHES LARGER THAN THE PIPE FOR 4 INCHES NOMINAL AND LARGER.

NFPA 13 (2013) SEC. 25.2.1.1 ALL INTERIOR PIPING AND APPURTENANCES SUBJECT TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI AND SHALL MAINTAIN THAT PRESSURE WITHOUT LOSS FOR 2 HOURS.

NFPA 13 (2013) SEC. 9.3.6 PROVIDED RESTRAINT AT END OF BRANCH LINES WITH ONE OF THE FOLLOWING:
 1. A LISTED SWAY BRACE ASSEMBLY.
 2. A WRAPAROUND U-HOOK SATISFYING THE REQUIREMENTS OF 9.3.5.3.8
 3. NO 12, 440-LB WIRE INSTALLED AT LEAST 45 DEGREES FROM THE VERTICAL PLANE AND ANCHORED ON BOTH SIDES OF THE PIPE.

NFPA 13 (2013) SEC. 9.3.5.8.1 TOPS OF RISERS EXCEEDING 3 FEET IN LENGTH SHALL BE PROVIDED WITH A 4-WAY BRACE ABOVE THE UPPER FLEXIBLE COUPLING ON RISER AND PREFERABLE TO THE ROOF STRUCTURE IF SUITABLE. THE BRACE SHOULD NOT BE ATTACHED DIRECTLY TO A PLYWOOD OR METAL DECK.

CBC (2013) SEC. 903.4.1 MAIN FIRE ALARM PANEL VALVE MONITORING AND WATER FLOW ALARM AND TROUBLE SIGNALS SHALL BE DISTINCTLY DIFFERENT AND SHALL BE AUTOMATICALLY TRANSMITTED TO AN APPROVED CENTRAL STATION MONITORING COMPANY.

NFPA 25 (2013) SEC. 5.2.6 / HYDRAULIC CALCULATIONS DESIGN DATA NAMEPLATE SHALL BE ATTACHED TO RISER.

NFPA 13 (2013) SEC. 25.1 SPRINKLER CONTRACTOR (C16) SHALL COMPLETE AND SIGN CONTRACTORS MATERIAL AND TEST CERTIFICATE FOR THE OVERHEAD SPRINKLER USING FORM IN FIG. 16.1. THIS FORM SHALL BE GIVEN TO THE INSPECTOR OF RECORD (IOR) WHO WILL TURN-IN FOR DSA RECORDS.

NFPA 13 (2013) SEC. 25.2.3.1 THE MAIN DRAIN VALVE SHALL BE OPENED AND REMAIN OPEN UNTIL THE SYSTEM PRESSURE STABILIZES. THE STATIC AND RESIDUAL PRESSURE SHALL BE RECORDED ON THE CONTRACTORS TEST CERTIFICATE. (WITNESSED BY THE INSPECTOR OF RECORD-IOR).

WHERE MECHANICAL TEES ARE USED TO SUPPLY SPRINKLER HEADS, DISKS SHALL BE RETRIEVED (SHOWN TO PROJECT INSPECTOR) BEFORE MECHANICAL TEE IS ATTACHED.

FIRE SPRINKLER DESIGN IS LIGHT HAZARD WITH A DENSITY OF .10 GPM FOR THE MOST REMOTE 1500 SQ. FT. OF AREA. DEDUCTION HAS BEEN TAKEN FOR QUICK RESPONSE HEADS.

WATER SUPPLY INFORMATION:
 TEST CONDUCTED BY OR INFORMATION SUPPLIED BY AND WET SIGNATURE OF:
 1. WATER PURVEYOR OR
 2. LOCAL FIRE AUTHORITY HAVING JURISDICTION (LFAHJ) OR
 3. IMPARTIAL THIRD PARTY WITH QUALIFICATION (PRE-APPROVAL FROM DSA OR (LFAHJ) REQUIRED

WELDING CERTIFICATIONS (WITH WELDERS STAMP ON ALL WELDS).

FIRE PROTECTION NOTES:

ALL INSTALLATION PER N.F.P.A. #13, 2013, DSA, CBC 2013, MANUFACTURER RECOMMENDATIONS, AND LOCAL FIRE DEPT. BUILDING FIRE SPRINKLERS TO BE DESIGNED FOR ORDINARY HAZARD GROUP 1, 0.15 GPM OVER 1500 SQ. FT. IN MECH ROOMS, STORAGE ROOMS AND KITCHENS AND FOR LIGHT HAZARD, 0.1 GPM OVER 1500 SQ. FT. IN OTHER AREAS. BUILDING IS HYDRAULICALLY CALCULATED PER N.F.P.A. #13. ALL SPRINKLERS ARE ORDINARY TEMPERATURE RATED AND QUICK RESPONSE TYPE. ALL MAIN PIPES SHALL BE HUNG BELOW MAIN BEAM. ALL BRANCH PIPES SHALL BE HUNG AS HIGH AS POSSIBLE. ALL PIPING 2" AND SMALLER SHALL BE SCHEDULE 40 STEEL PIPE WITH THREADED FITTINGS. ALL PIPING 2.5" AND LARGER SHALL BE SCHEDULE 10 PIPE GROOVED AND WELDED. ALTERNATE PIPING MAY BE PERMITTED WITH PRIOR APPROVAL. ALL ARMOVERS UNDER 12" LONG ARE 1" U.O.N. ALL FIRE SPRINKLER PIPING SHALL BE TESTED AND FLUSHED PER N.F.P.A. #13 AND 24. WATER FLOW SUPPLY 82 / 50 /1872 PER CAL WATER DEPARTMENT. CONSTRUCTION IS NON COMBUSTIBLE OBSTRUCTED. NO SPRINKLER COVERAGE ABOVE CEILINGS. SPRINKLERS ARE SPACED WITH MAX. COVERAGE OF 130 SQ. FT IN MECH ROOMS, AND UP TO 400 SQ. FT. IN OTHER AREAS WITH EXTENDED COVERAGE HEADS. ALL DIMENSIONS SHOWN ARE CENTER TO CENTER U.O.N. ALL VALVES SHALL BE MONITORED PER NFPA 13 AND NFPA 72 BY AN APPROVED CENTRAL STATION. ALL PIPES SHALL BE SUPPORTED AND BRACED PER NFPA 13. COORDINATE ALL WORK WITH OTHER TRADES. ALL WELDED PIPE SHALL BE INSPECTED PRIOR TO INSTALLATION. NO PIPING SHALL BE CONCEALED WITHOUT THE APPROVAL OF BOTH THE BUILDING AND FIRE INSPECTOR.

WATER SUPPLY INFORMATION


FLOW TEST PROVIDED BY ON-SITE FLOW TEST.

STATIC PRESSURE: 70 PSI
 RESIDUAL PRESSURE: 30 PSI
 FLOW: 490 GPM

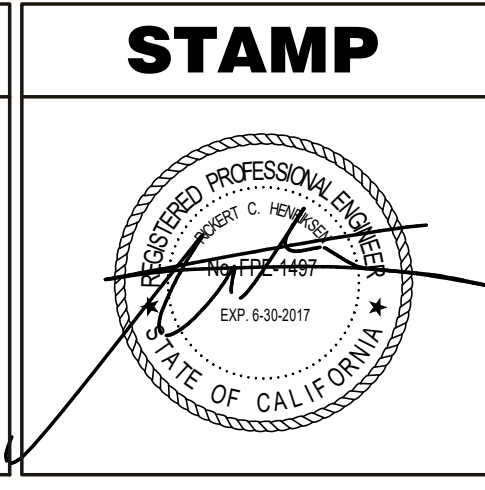
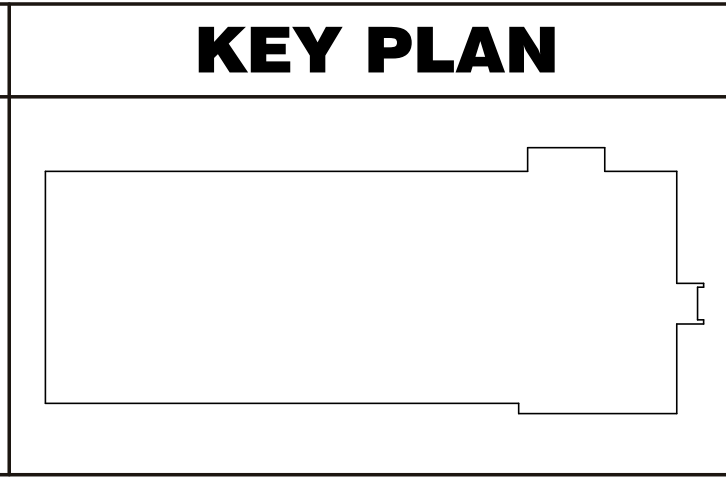
490 GPM AT 20 PSI.

FINAL BID DOCUMENTS (14-251)	4/14/16
100% CONSTRUCTION DOCUMENTS (14-248)	01/22/16
100% DESIGN DEVELOPMENT (14-244)	10/23/15
50% DESIGN DEVELOPMENT (14-233)	8/21/15
100% SCHEMATIC DESIGN (14-185)	3/6/15
Revisions:	Date

CONSULTANTS:



15000 Old Riverdale Road
 Sacramento, CA 95827-2903
 Phone: (916) 362-4468
 Fax: (916) 362-4469
 www.saceng.com



ARCHITECT/ENGINEERS:




ATTENTION:
 ONLY WET SIGNED DOCUMENTS CONSTITUTE ADVANCE DESIGN CONSULTANTS, INC. PROFESSIONAL WORK AND SHALL BE KEPT IN THE ORIGINAL DOCUMENTS AND NOT BE ALIENATED WITHOUT THE CONSENT OF ADVANCE DESIGN CONSULTANTS, INC. THE WET SIGNED DOCUMENTS MUST BE REFERRED TO FOR THE ORIGINAL AND CORRECT INFORMATION. IF THERE ARE ANY DIFFERENCES BETWEEN THE WET SIGNED DOCUMENTS AND ANY OTHER DOCUMENTS, THE WET SIGNED DOCUMENTS SHALL GOVERN.
 ADVANCE DESIGN CONSULTANTS, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO THESE DOCUMENTS BY ANYONE OTHER THAN AUTHORIZED REPRESENTATIVES OF ADVANCE DESIGN CONSULTANTS, INC.
 POB 13-358-38

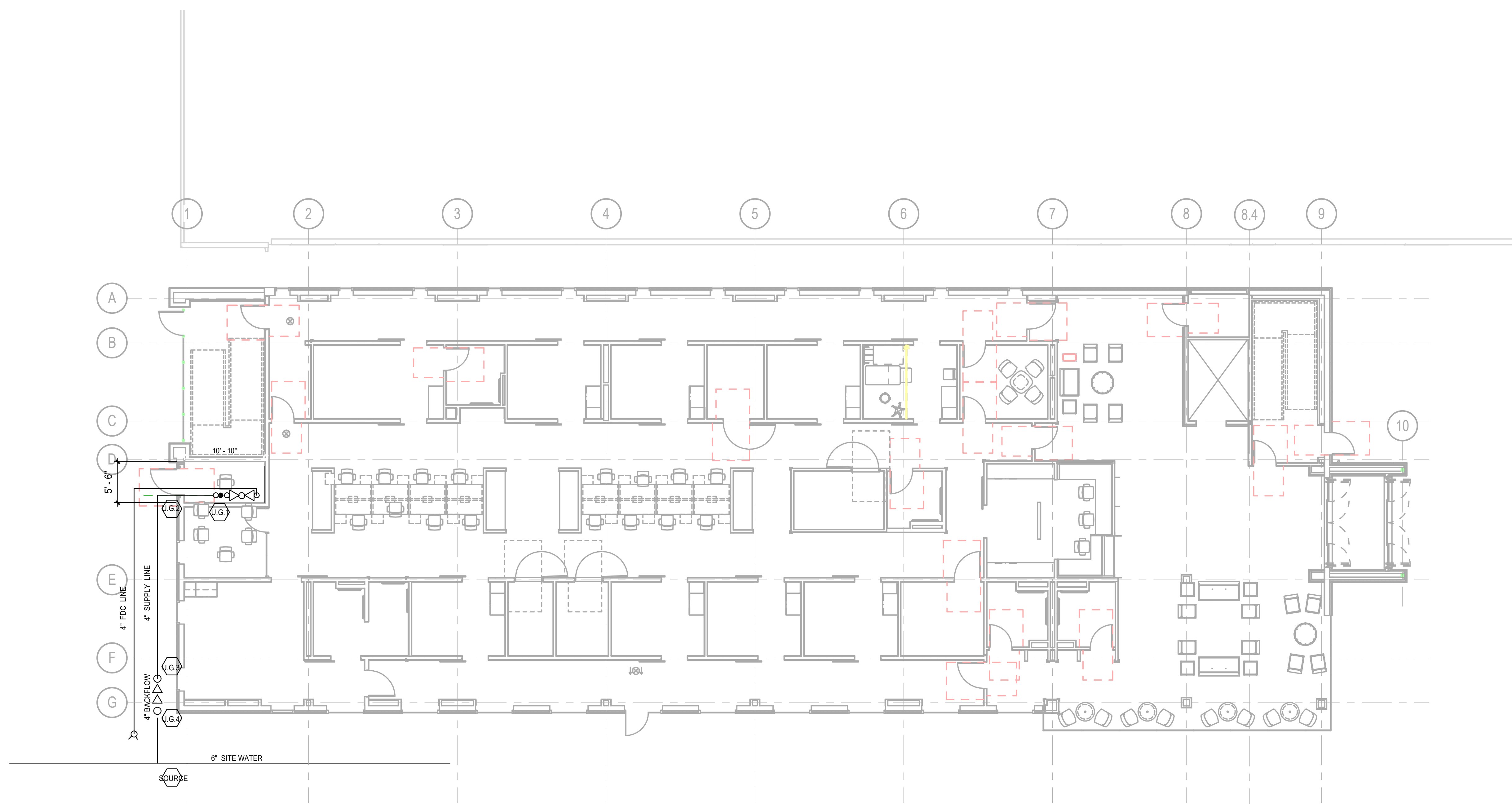
998 PARK AVENUE SAN JOSE CALIFORNIA 95126
P: (408) 287-1881 F: (408)294-3186 www.adcengineers.com

Drawing Title: GENERAL NOTES	Project Title: CONSTRUCT PRIMARY CARE SERVICES BLDG.	Project Number: 612-400
Approved: Project Director	Location: 10535 HOSPITAL WAY, MATHER, CA	Building Number: 642
Date: 4/14/16	Checked: RH	Drawn: GB
		Drawing Number: FP0
		Dwg. of

Office of Facilities Management



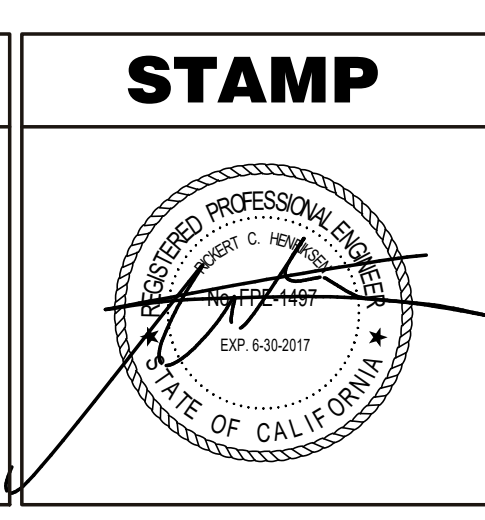
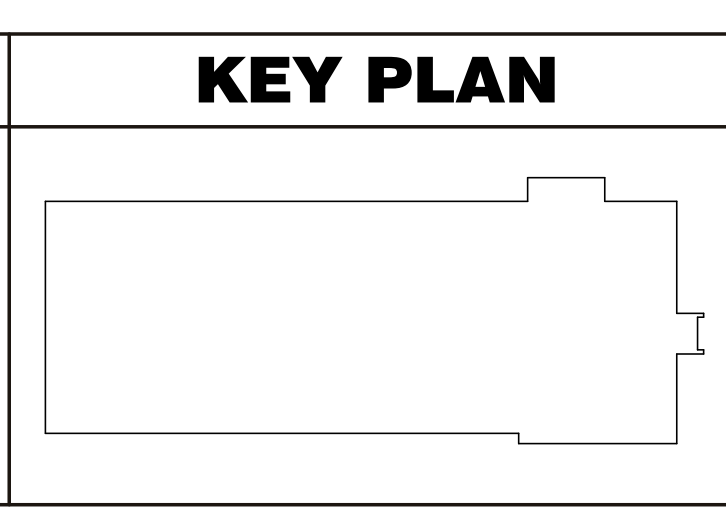
three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



1 Fire Sprinkler Site Plan
 FP1 SCALE: 1/8" = 1'-0"

FINAL BID DOCUMENTS (14-251)	4/14/16
100% CONSTRUCTION DOCUMENTS (14-248)	01/22/16
100% DESIGN DEVELOPMENT (14-244)	10/23/15
50% DESIGN DEVELOPMENT (14-233)	8/21/15
100% SCHEMATIC DESIGN (14-185)	3/6/15
Revisions:	Date

CONSULTANTS:



ARCHITECT/ENGINEERS:

ATTENTION: ONLY WET SIGNED DOCUMENTS CONSTITUTE ADVANCE DESIGN CONSULTANTS, INC. PROFESSIONAL WORK AND BECAUSE OTHER RESPONSIBLE DOCUMENTS CAN BE EASILY ALTERED WITHOUT THE CONSENT OF ADVANCE DESIGN CONSULTANTS, INC., THE WET SIGNED DOCUMENTS MUST BE REFERRED TO FOR THE ORIGINAL AND CORRECT INFORMATION. IF THERE ARE ANY DIFFERENCES BETWEEN THE WET SIGNED DOCUMENTS AND ANY OTHER DOCUMENTS, THE WET SIGNED DOCUMENTS SHALL GOVERN. ADVANCE DESIGN CONSULTANTS, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO OUR DOCUMENTS BY ANYONE OTHER THAN AUTHORIZED REPRESENTATIVES OF ADVANCE DESIGN CONSULTANTS, INC. PO# 13-308-38

Drawing Title:
 SITE PLAN

Approved: Project Director

Project Title:
 CONSTRUCT PRIMARY CARE SERVICES BLDG.

Location:
 10535 HOSPITAL WAY, MATHER, CA

Date: 4/14/16

Checked: RH

Drawn: GB

Project Number:
 612-400

Building Number:
 642

Drawing Number:
 FP1

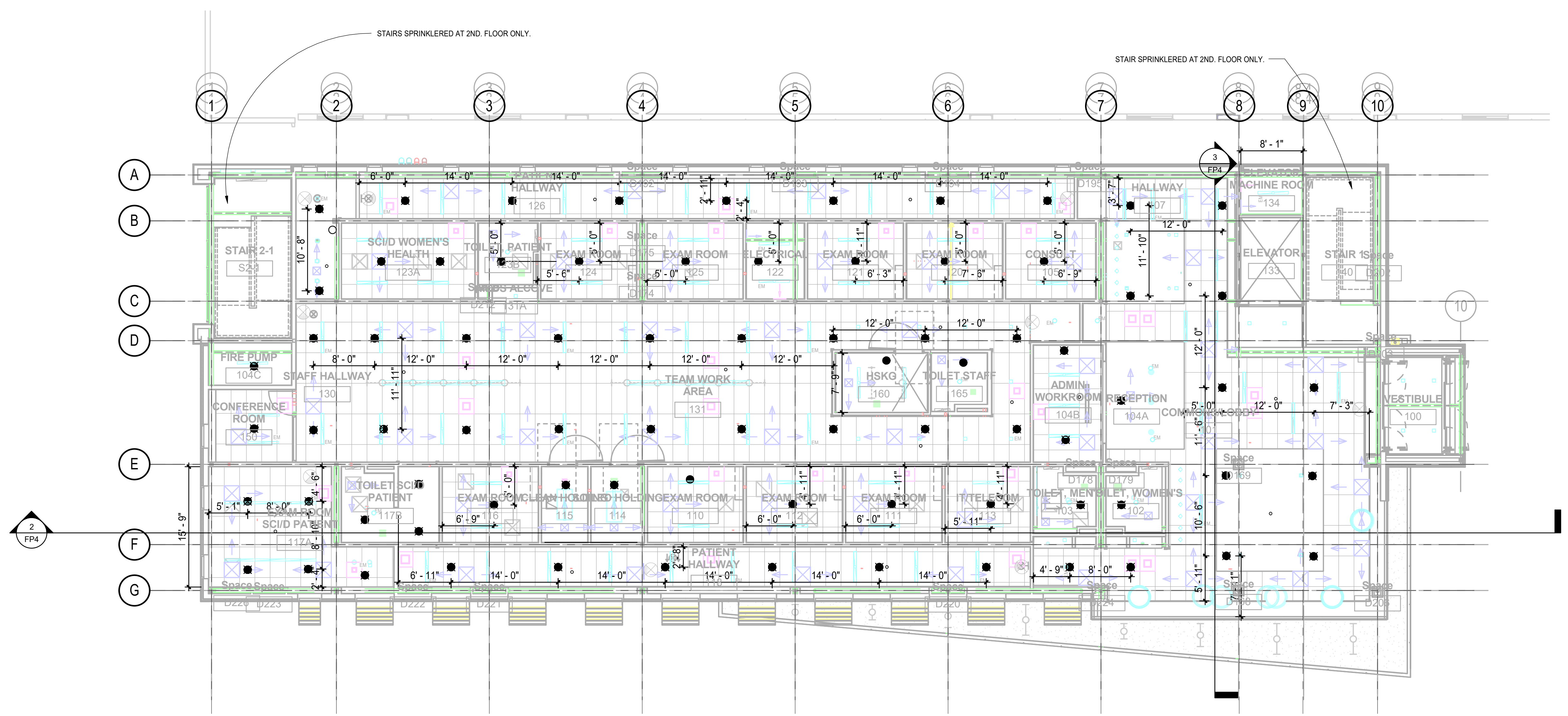
Dwg. of

Office of Facilities Management

Department of Veterans Affairs

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot

FIRST FLOOR		SPRINKLER LEGEND						
SYM.	MAKE & MODEL	ORIF	K	TEMP	FINISH	CANOPY	QTY	
●	TYCO-TY3231 RECESSED PENDANT Q.R.	1/2"	5.8	155	CHROME	CHROME	72	
●	TYCO-TY3231 UPRIGHT Q.R.	1/2"	5.8	155	BRASS	NONE	3	
TOTAL SPRINKLERS THIS SHEET							75	



1 1st Floor Ceiling Plan - Design
 FP2 SCALE: 1/8" = 1'-0"

Revisions:	Date
FINAL BID DOCUMENTS (14-251)	4/14/16
100% CONSTRUCTION DOCUMENTS (14-248)	01/22/16
100% DESIGN DEVELOPMENT (14-244)	10/23/15
50% DESIGN DEVELOPMENT (14-233)	8/21/15
100% SCHEMATIC DESIGN (14-185)	3/6/15

CONSULTANTS:

15500 Old Riverdale Road
 Sacramento, CA 95827-2203
 Phone: (916) 362-4458
 Fax: (916) 362-4459
 www.saceng.com

KEY PLAN

STAMP

ARCHITECT/ENGINEERS:

ADVANCE DESIGN CONSULTANTS, INC.
 998 PARK AVENUE SAN JOSE CALIFORNIA 95126
 P: (408) 287-1881 F: (408)294-3186 www.adcengineers.com

ATTENTION:
 ONLY WET SIGNED DOCUMENTS CONSTITUTE ADVANCE DESIGN CONSULTANTS, INC. PROFESSIONAL WORK AND BECAUSE OTHER RESPONSIBLE DOCUMENTS MAY BE EASILY ALTERED WITHOUT THE CONSENT OF ADVANCE DESIGN CONSULTANTS, INC., THE WET SIGNED DOCUMENTS MUST BE REFERRED TO FOR THE ORIGINAL AND CORRECT INFORMATION. IF THERE ARE ANY DIFFERENCES BETWEEN THE WET SIGNED DOCUMENTS AND ANY OTHER DOCUMENTS, THE WET SIGNED DOCUMENTS SHALL GOVERN.
 ADVANCE DESIGN CONSULTANTS, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO THESE DOCUMENTS BY ANYONE OTHER THAN AUTHORIZED REPRESENTATIVES OF ADVANCE DESIGN CONSULTANTS, INC.
 P01-13-308-01

Drawing Title:
1st FLOOR CEILING PLAN

Approved: Project Director

Project Title:
CONSTRUCT PRIMARY CARE SERVICES BLDG.

Location:
10535 HOSPITAL WAY, MATHER, CA

Date:
4/14/16

Checked:
 RH

Drawn:
 GB

Project Number:
612-400

Building Number:
642

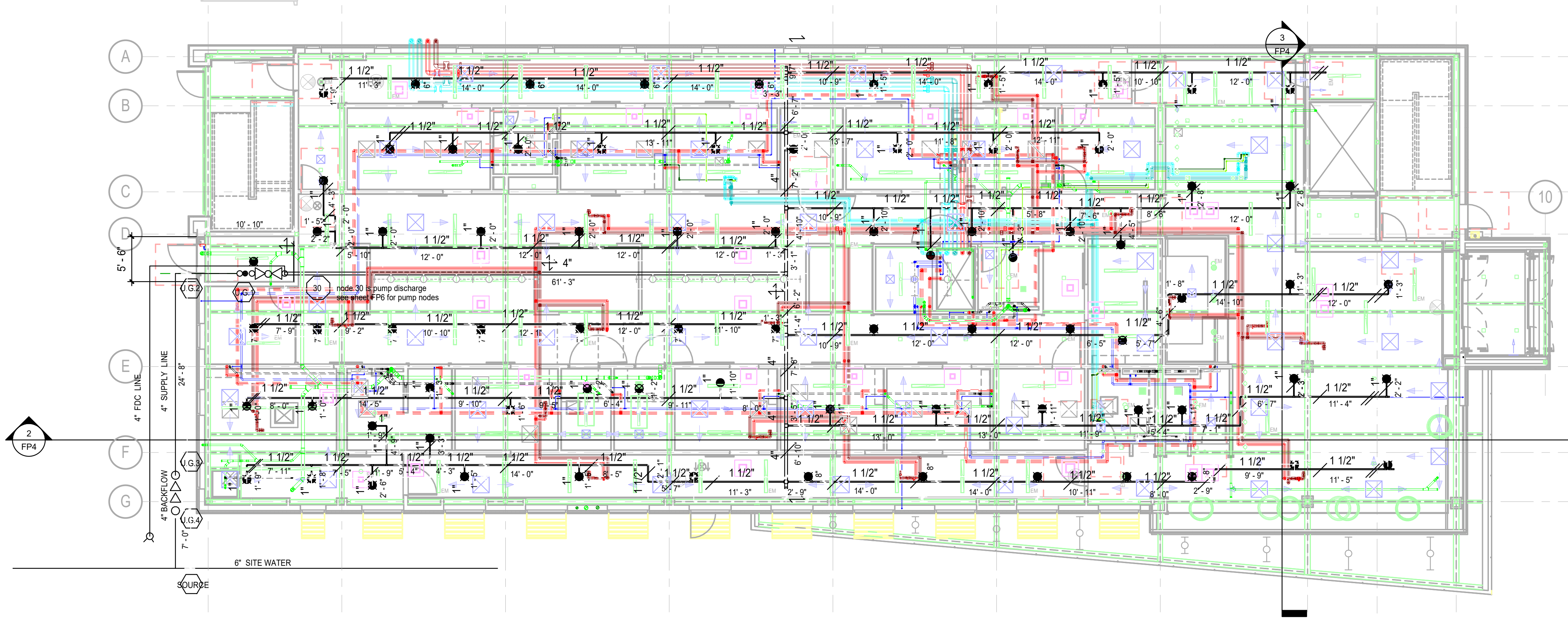
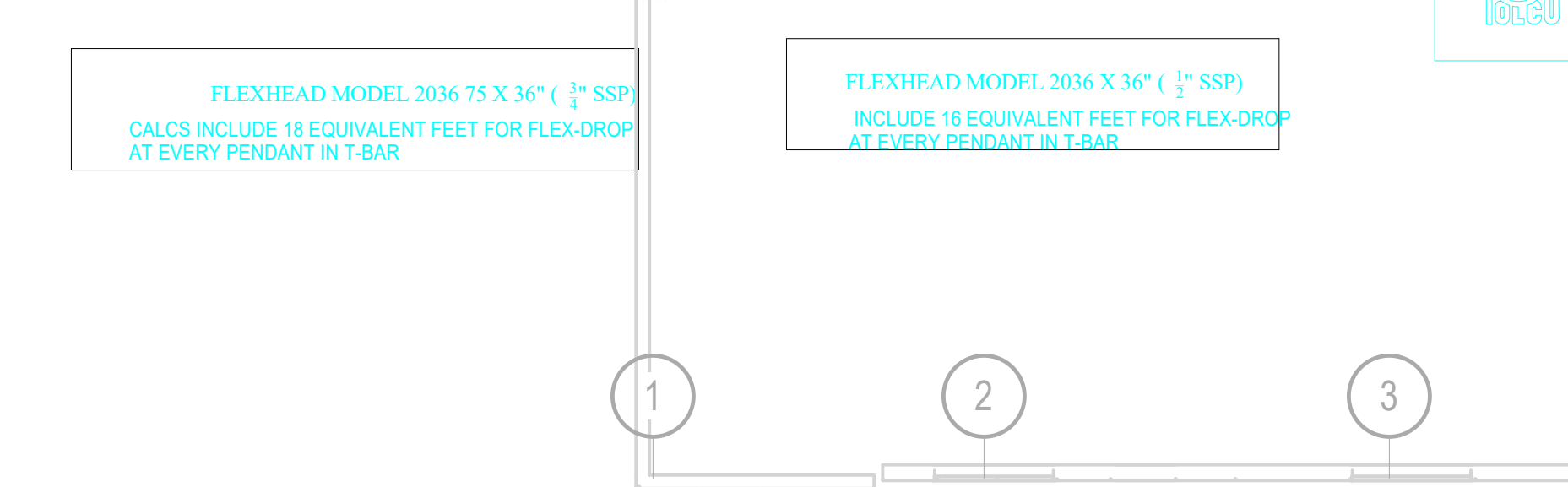
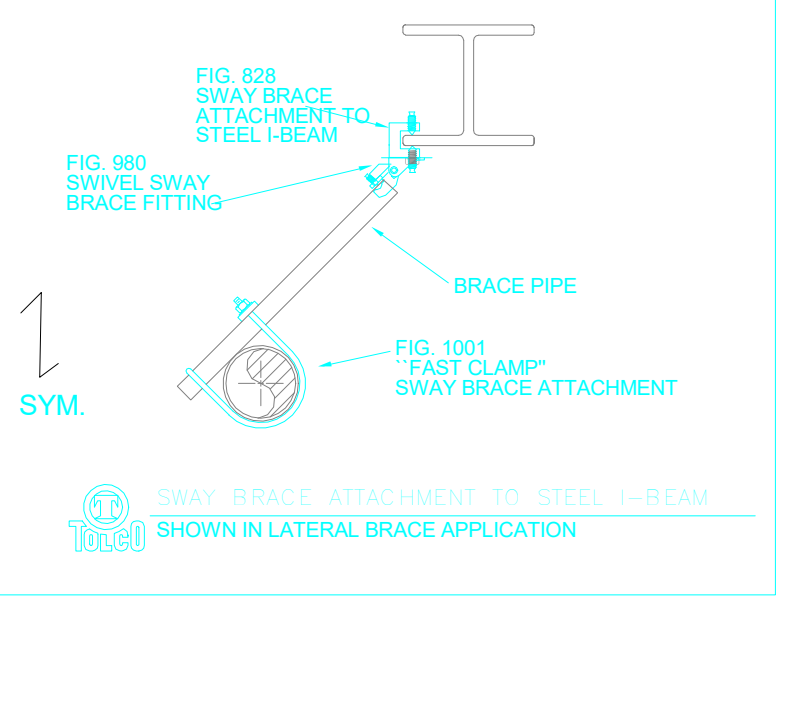
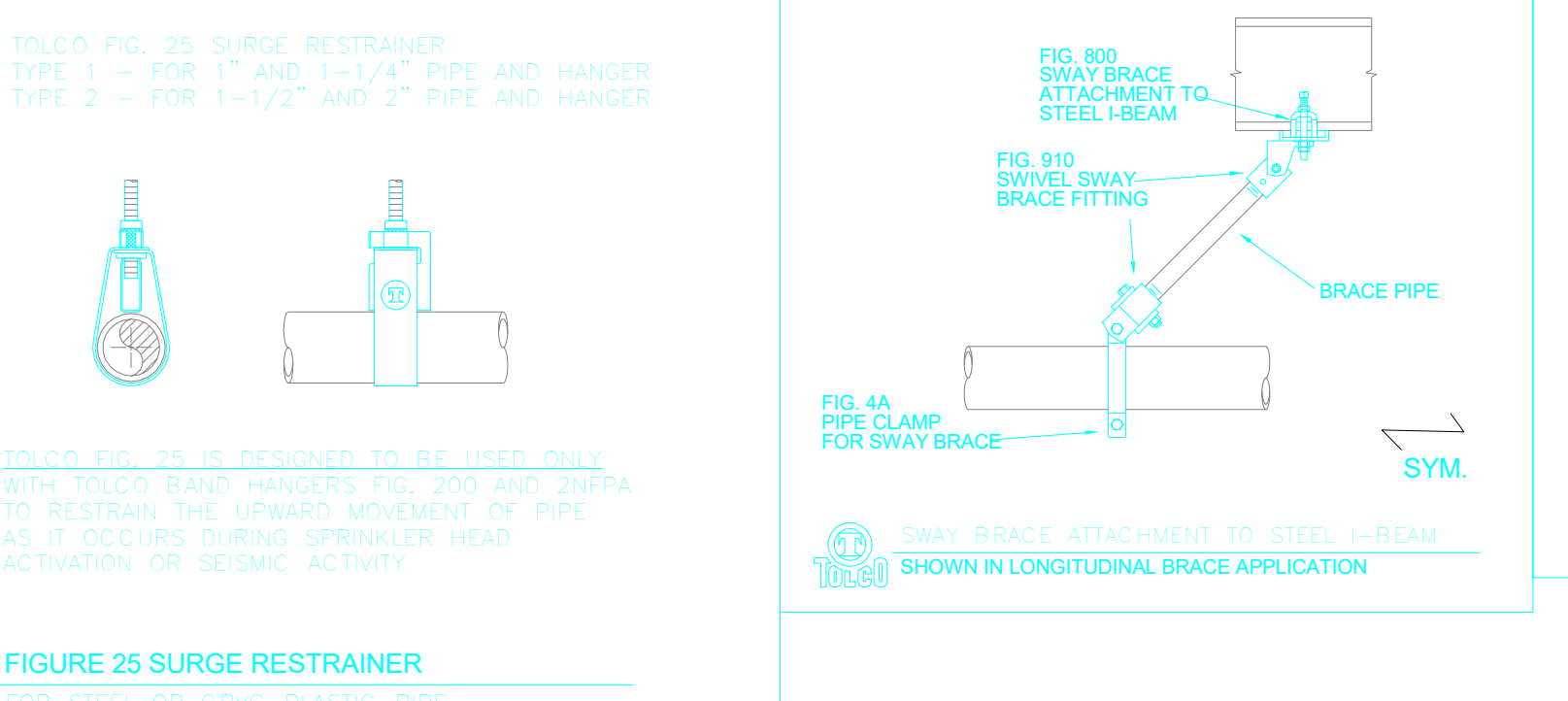
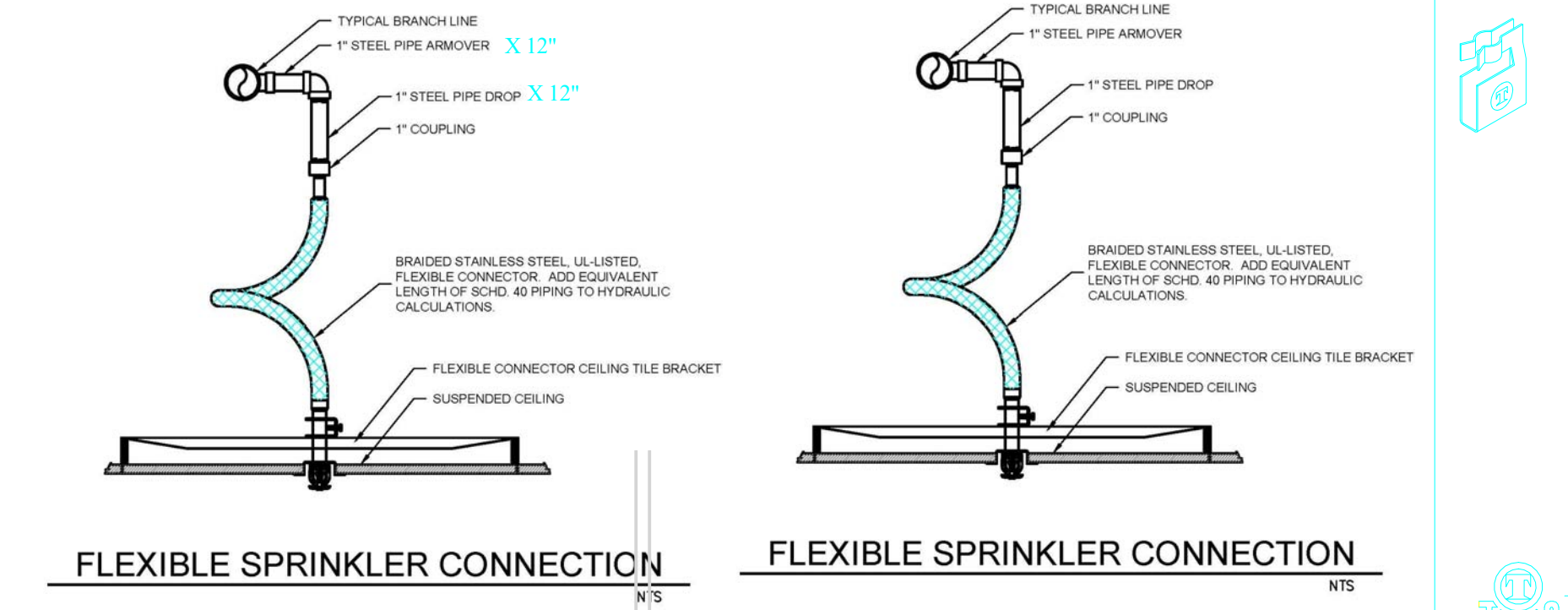
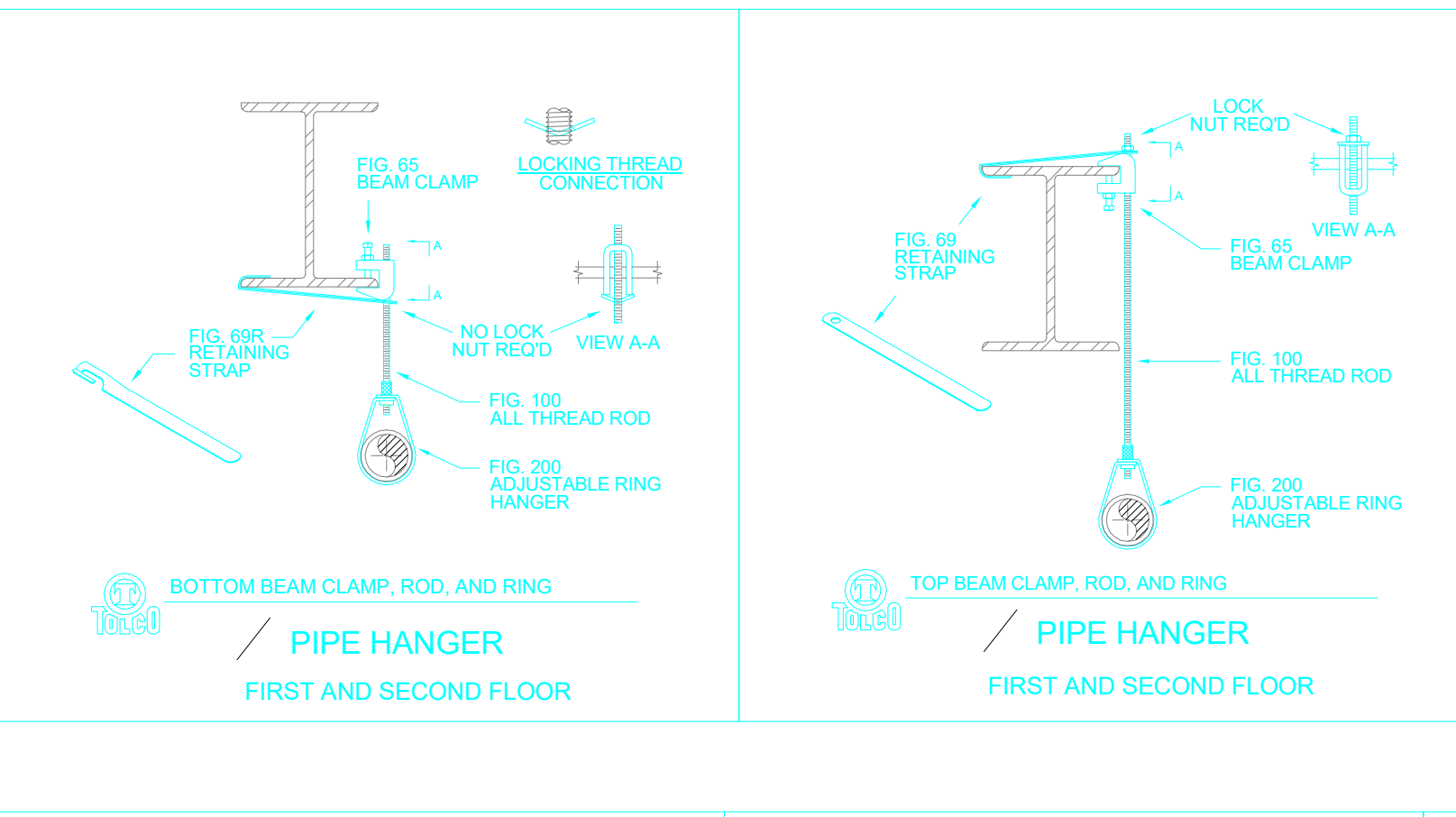
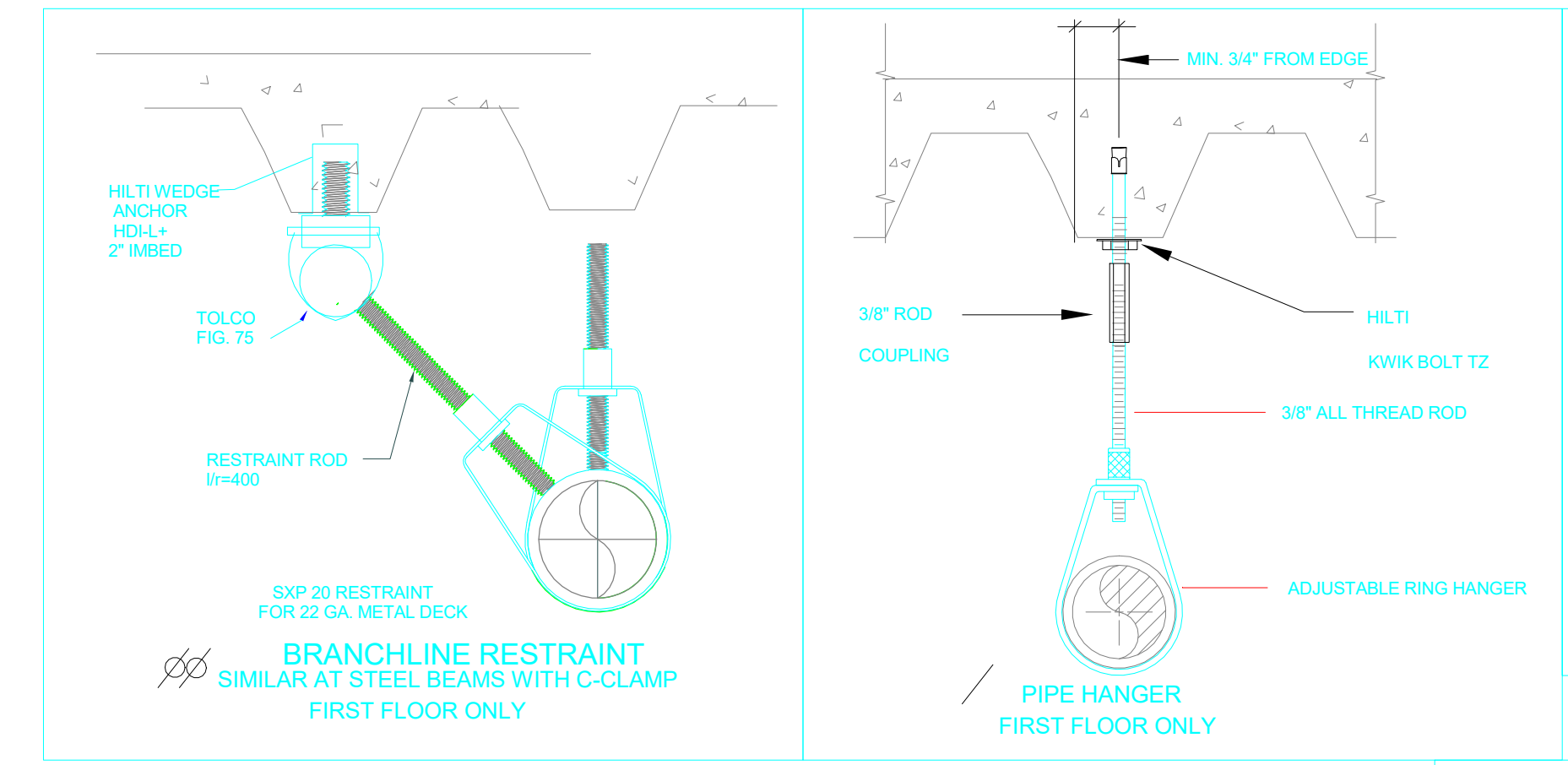
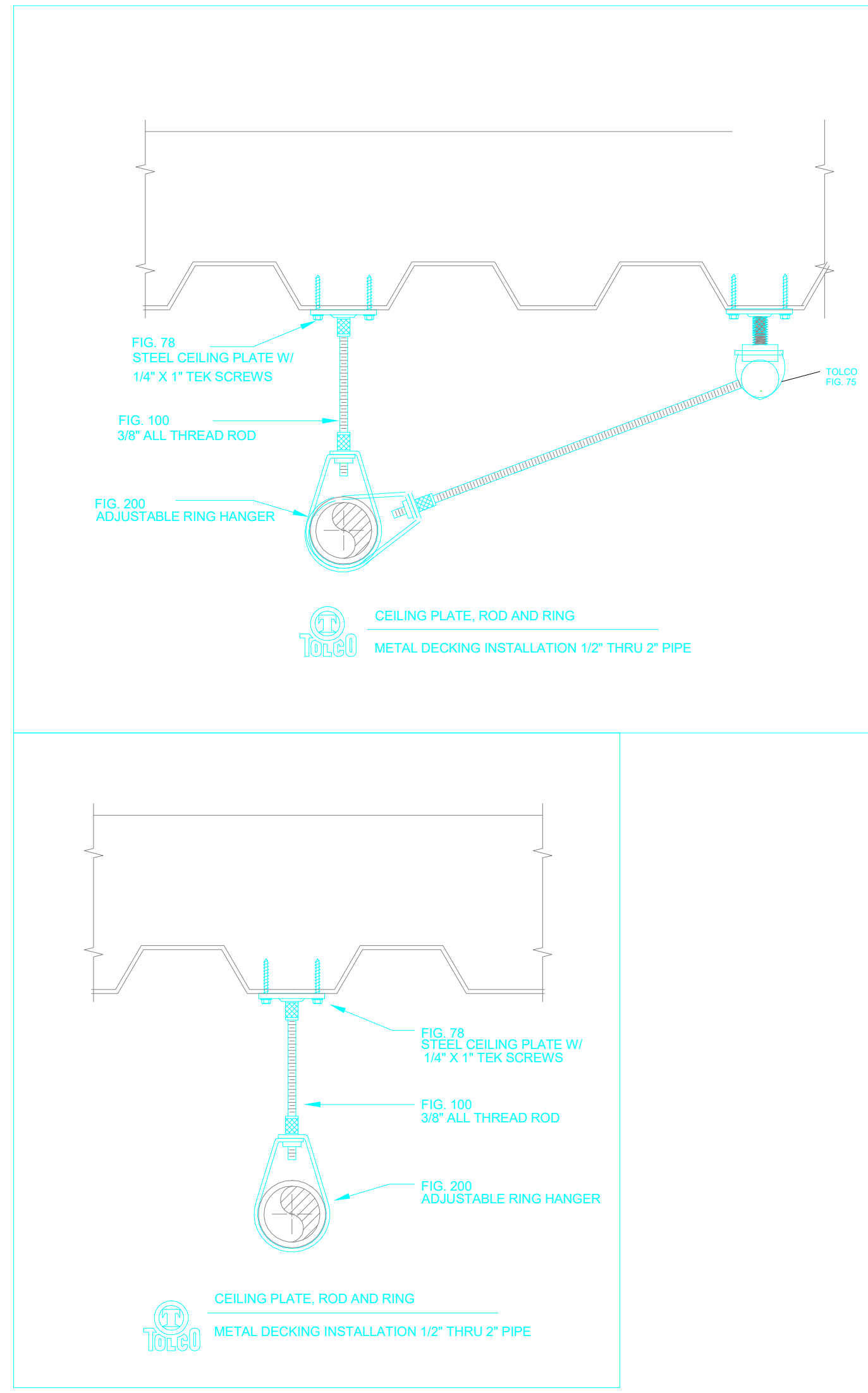
Drawing Number:
FP2

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

three eighths inch = one foot
 one half inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



1
 FP2.1
1st Floor Piping Plan
 SCALE: 1/8" = 1'-0"

Revisions:	Date
FINAL BID DOCUMENTS (14-251)	4/14/16
100% CONSTRUCTION DOCUMENTS (14-248)	01/22/16
100% DESIGN DEVELOPMENT (14-244)	10/23/15
50% DESIGN DEVELOPMENT (14-233)	8/21/15
100% SCHEMATIC DESIGN (14-185)	3/6/15

CONSULTANTS:

10555 Old Placerville Road
 Sacramento, CA 95827-2903
 Phone: (916) 365-4458
 Fax: (916) 365-4459
 www.saceng.com

KEY PLAN

STAMP

ARCHITECT/ENGINEERS:

ATTENTION:
 ONLY WET SIGNED DOCUMENTS CONSTITUTE ADVANCE DESIGN CONSULTANTS, INC. PROFESSIONAL WORK AND NEITHER OTHER RESPONSIBLE DOCUMENTS MAY BE EARLY ALTERED WITHOUT THE CONSENT OF ADVANCE DESIGN CONSULTANTS, INC. THE WET SIGNED DOCUMENTS MUST BE REFERRED TO FOR THE ORIGINAL AND CORRECT INFORMATION. IF THERE ARE ANY DIFFERENCES BETWEEN THE WET SIGNED DOCUMENTS AND ANY OTHER DOCUMENTS, THE WET SIGNED DOCUMENTS SHALL GOVERN.
 ADVANCE DESIGN CONSULTANTS, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO OUR DOCUMENTS BY ANYONE OTHER THAN AUTHORIZED REPRESENTATIVES OF ADVANCE DESIGN CONSULTANTS, INC.
 998 PARK AVENUE SAN JOSE CALIFORNIA 95126
 P: (408) 287-1881 F: (408)294-3186 www.adcengineers.com
 POK 13-336-38

Drawing Title:
1st FLOOR PIPING PLAN

Approved: Project Director

Project Title:
CONSTRUCT PRIMARY CARE SERVICES BLDG.

Location:
10535 HOSPITAL WAY, MATHER, CA

Date:
4/14/16

Checked:
 RH

Drawn:
 GB

Project Number:
612-400

Building Number:
642

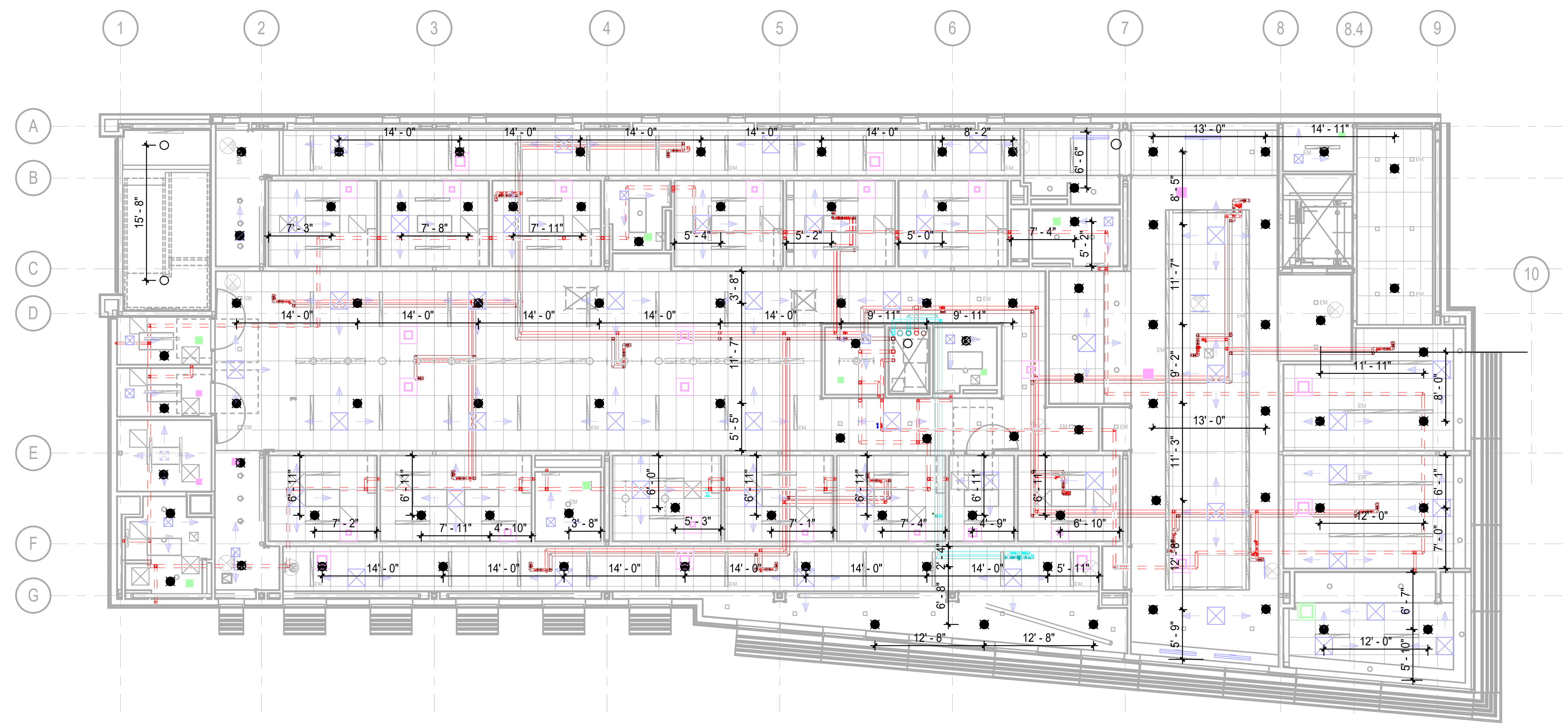
Drawing Number:
FP2.1

Dwg. of

Office of Facilities Management

one eighth inch = one foot
 one quarter inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one inch = one foot
 one and one half inches = one foot
 two inches = one foot
 three inches = one foot
 four inches = one foot
 five inches = one foot
 six inches = one foot
 seven inches = one foot
 eight inches = one foot
 nine inches = one foot
 ten inches = one foot
 eleven inches = one foot
 twelve inches = one foot
 thirteen inches = one foot
 fourteen inches = one foot
 fifteen inches = one foot
 sixteen inches = one foot
 seventeen inches = one foot
 eighteen inches = one foot
 nineteen inches = one foot
 twenty inches = one foot
 twenty one inches = one foot
 twenty two inches = one foot
 twenty three inches = one foot
 twenty four inches = one foot
 twenty five inches = one foot
 twenty six inches = one foot
 twenty seven inches = one foot
 twenty eight inches = one foot
 twenty nine inches = one foot
 thirty inches = one foot

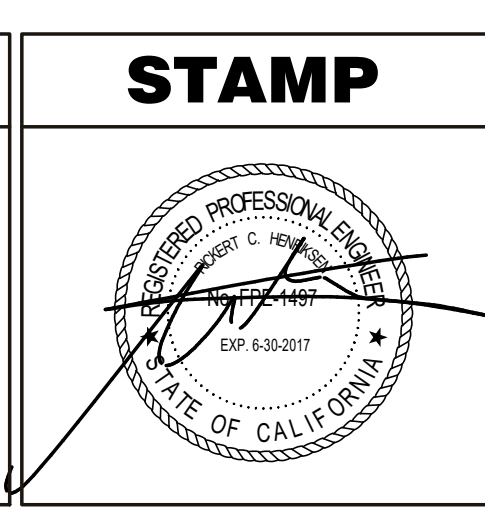
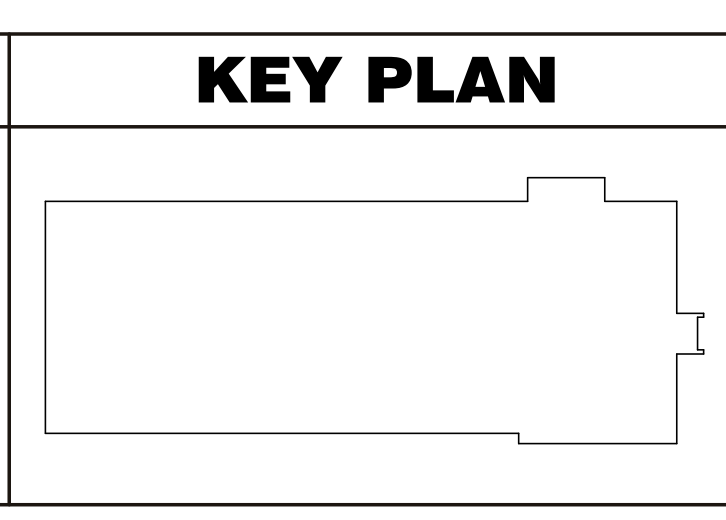
SECOND FLOOR SPRINKLER LEGEND							
SYMBOL	MAKE & MODEL	ORIF	K	TEMP	FINISH	CANOPY	QTY
●	TYCO- TY-3231 RECESSED PENDANT Q.R.	1/2"	5.6	155	CHROME	CHROME	86
●	TYCO- TY-3231 UPRIGHT Q.R.	1/2"	5.6	155	BRASS	NONE	6
TOTAL SPRINKLERS THIS SHEET							92



1 2nd Floor Ceiling Plan
 FP3 SCALE: 1/8" = 1'-0"

Revisions:	Date
FINAL BID DOCUMENTS (14-251)	4/14/16
100% CONSTRUCTION DOCUMENTS (14-248)	01/22/16
100% DESIGN DEVELOPMENT (14-244)	10/23/15
50% DESIGN DEVELOPMENT (14-233)	8/21/15
100% SCHEMATIC DESIGN (14-185)	3/6/15

CONSULTANTS:



ARCHITECT/ENGINEERS:

ATTENTION: ONLY WET SIGNED DOCUMENTS CONSTITUTE ADVANCE DESIGN CONSULTANTS, INC. PROFESSIONAL WORK AND BECAUSE OTHER RESPONSIBLE DOCUMENTS CAN BE EASILY ALTERED WITHOUT THE CONSENT OF ADVANCE DESIGN CONSULTANTS, INC., THE WET SIGNED DOCUMENTS MUST BE REFERRED TO FOR THE ORIGINAL AND CORRECT INFORMATION. IF THERE ARE ANY DIFFERENCES BETWEEN THE WET SIGNED DOCUMENTS AND ANY OTHER DOCUMENTS, THE WET SIGNED DOCUMENTS SHALL GOVERN. ADVANCE DESIGN CONSULTANTS, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO OUR DOCUMENTS BY ANYONE OTHER THAN AUTHORIZED REPRESENTATIVES OF ADVANCE DESIGN CONSULTANTS, INC. FOR 13-308-38

Drawing Title:
2nd FLOOR CEILING PLAN

Approved: Project Director

Project Title:
CONSTRUCT PRIMARY CARE SERVICES BLDG.

Location:
10535 HOSPITAL WAY, MATHER, CA

Date:
4/14/16

Checked:
 RH

Drawn:
 GB

Project Number:
612-400

Building Number:
642

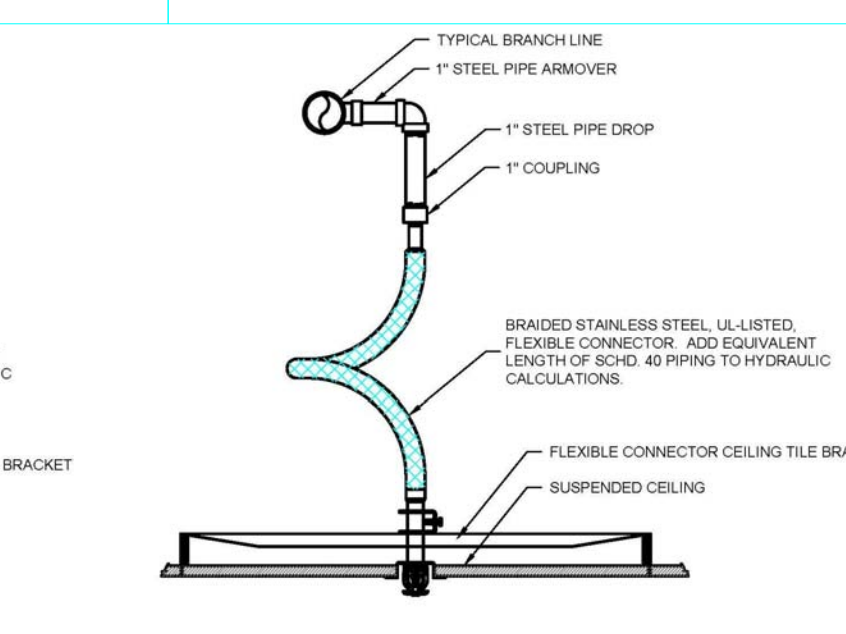
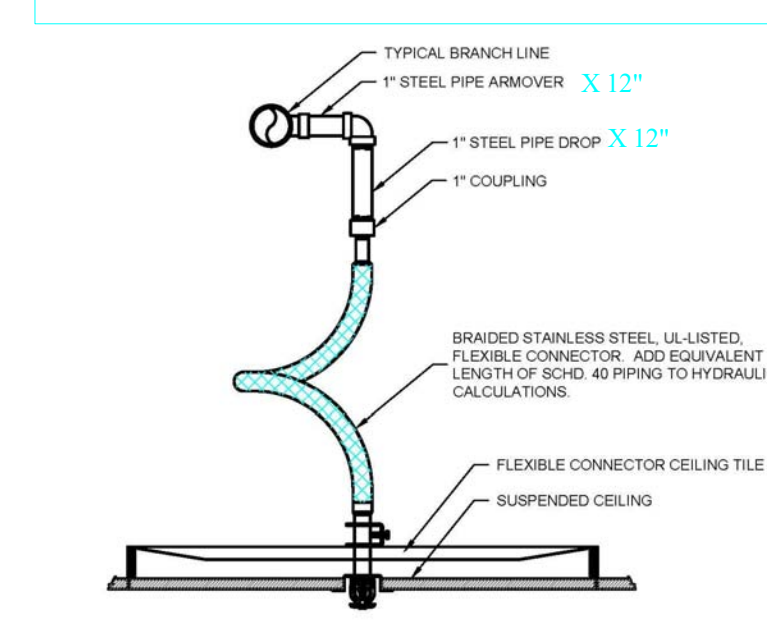
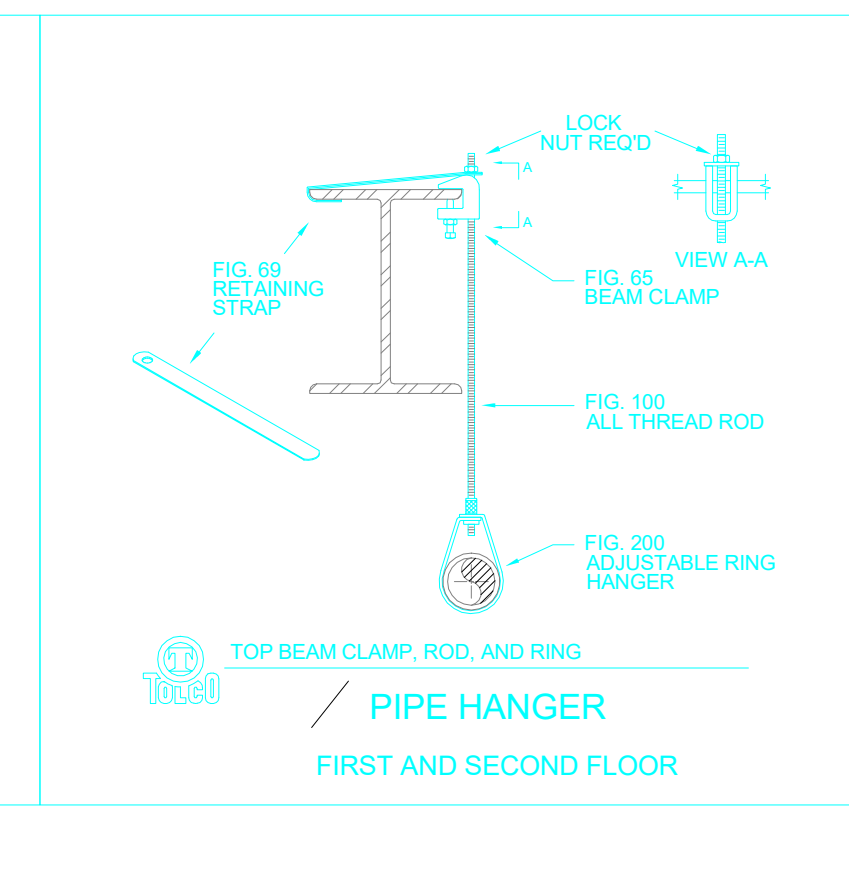
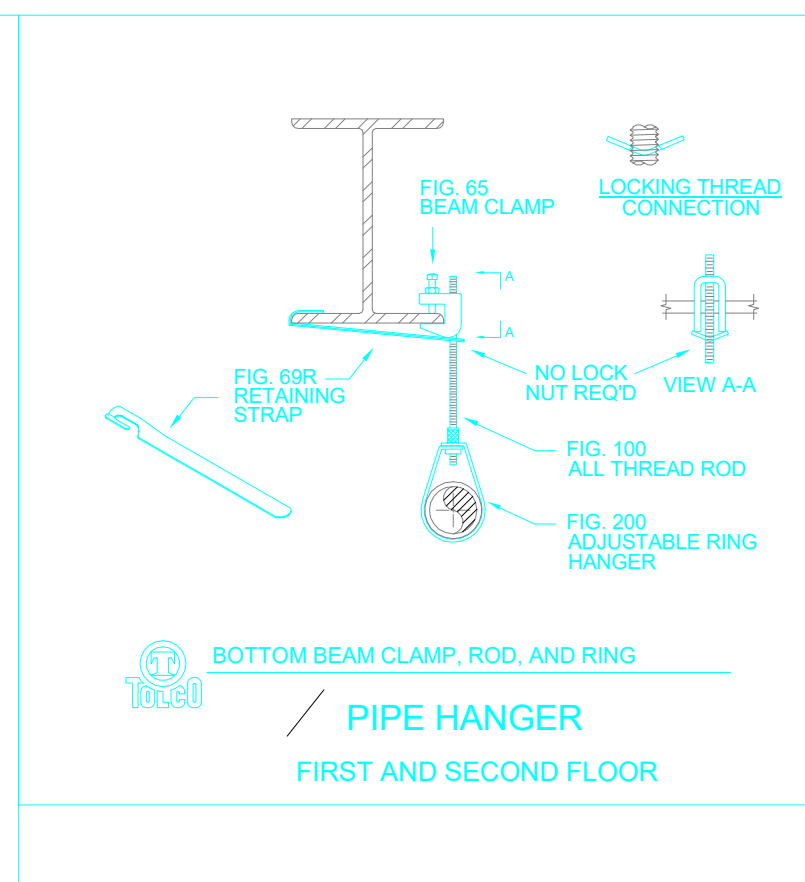
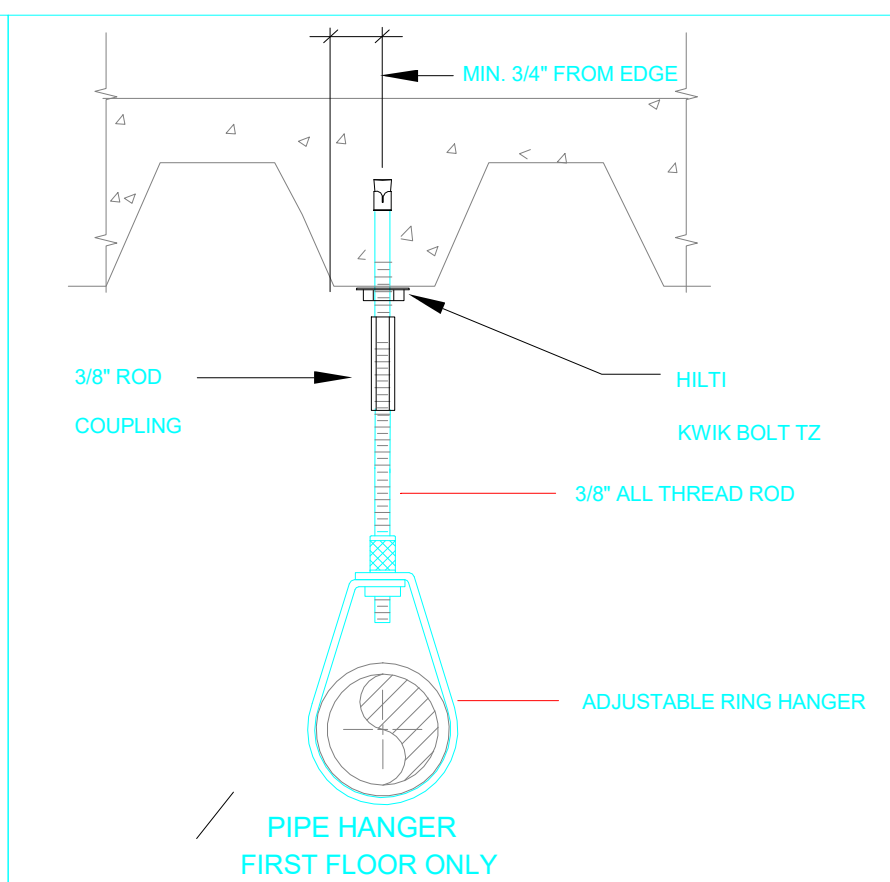
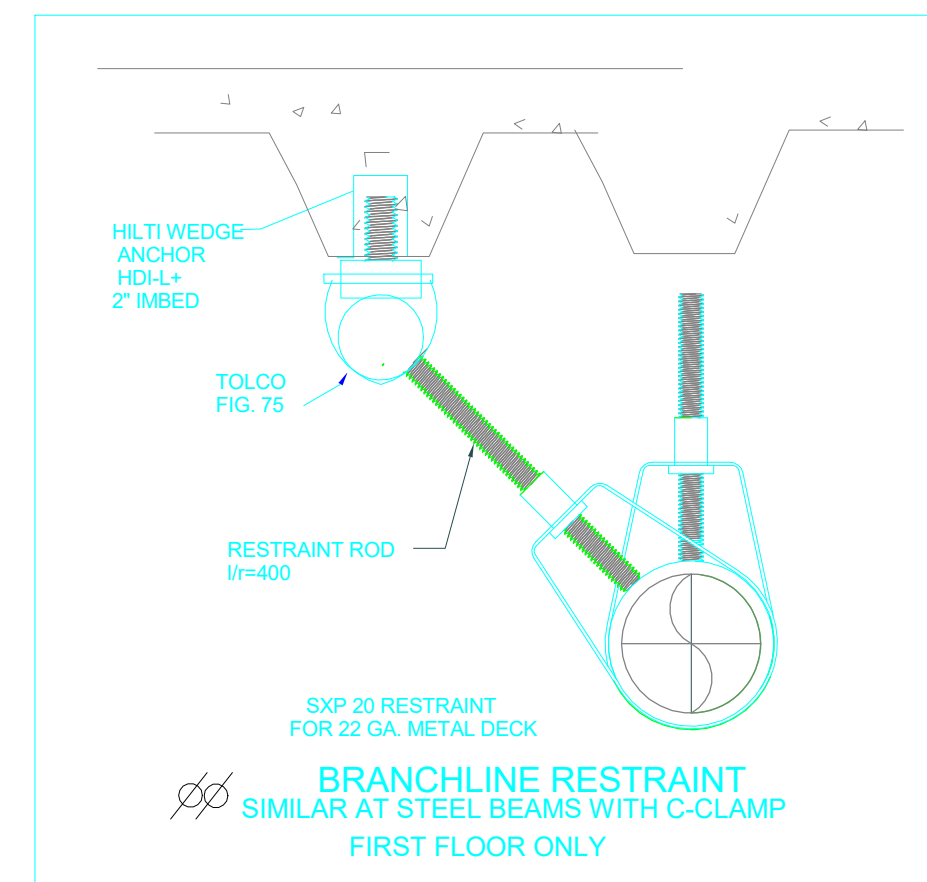
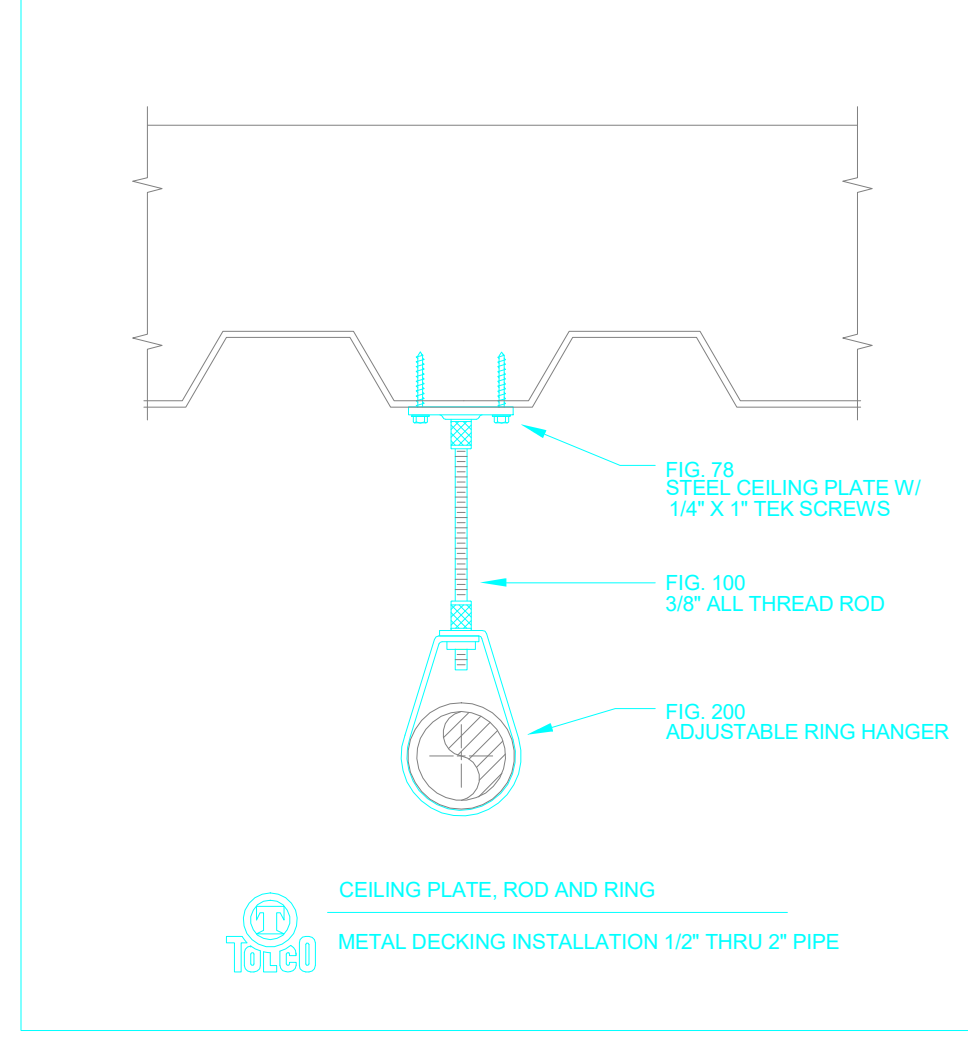
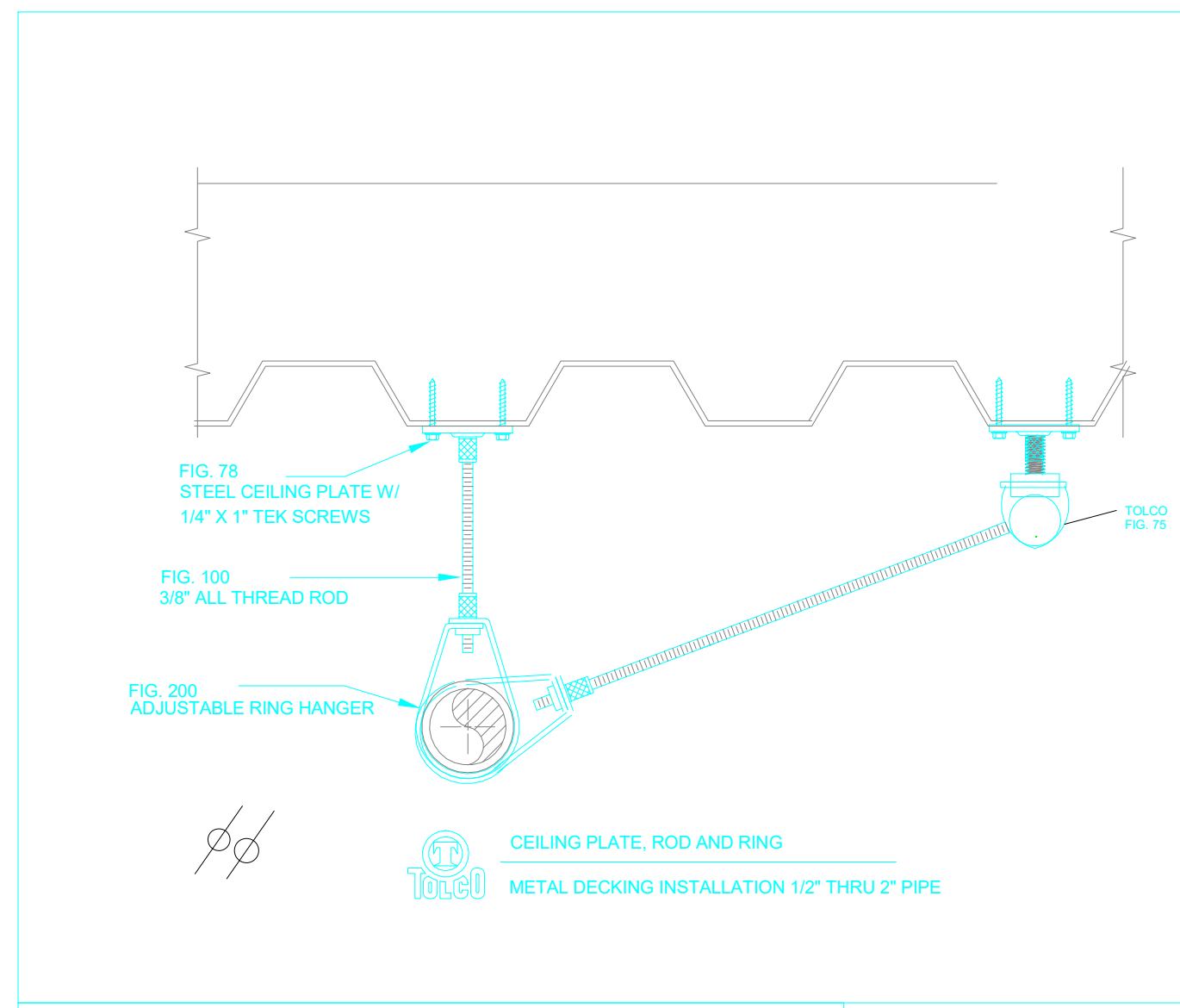
Drawing Number:
FP3

Dwg. of

Office of Facilities Management

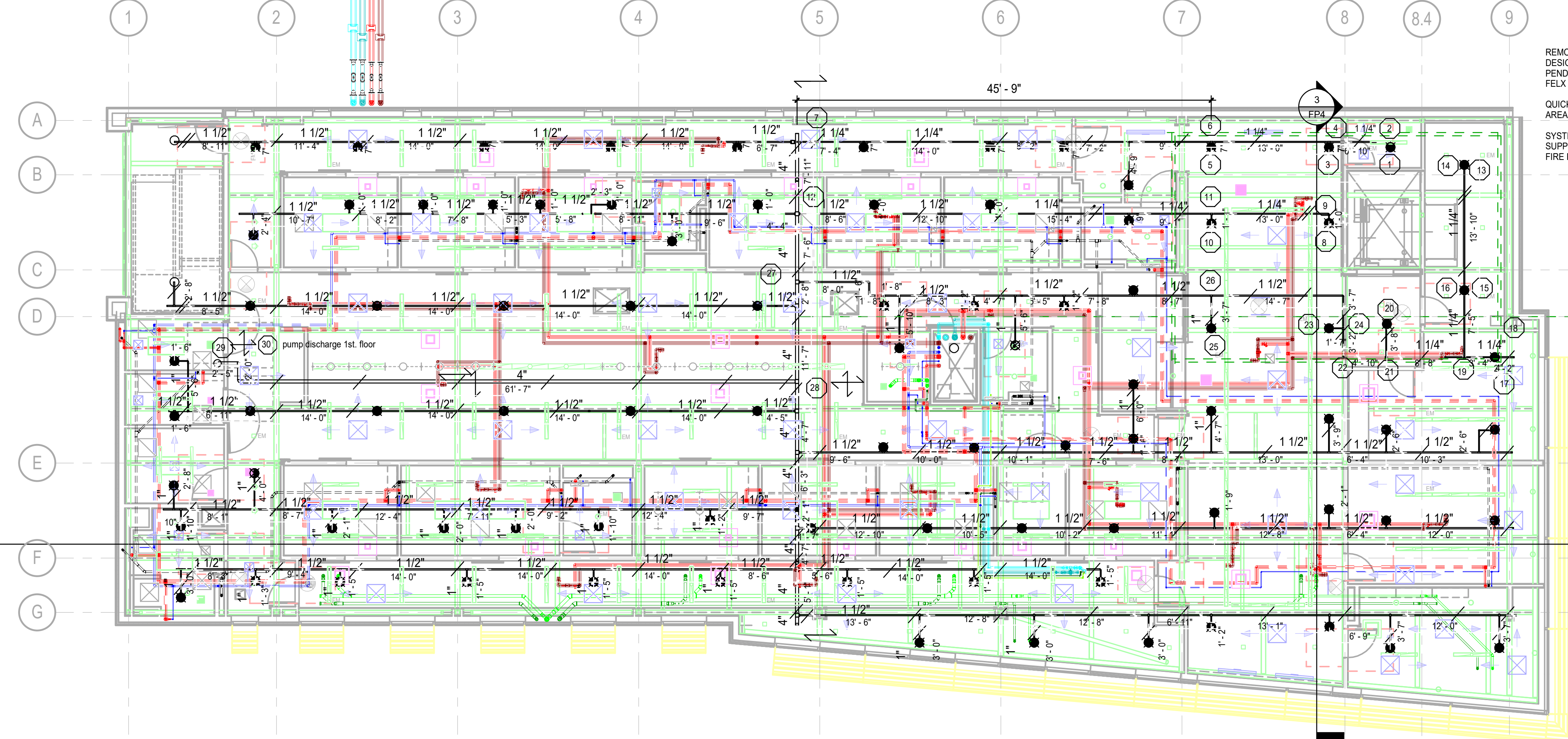
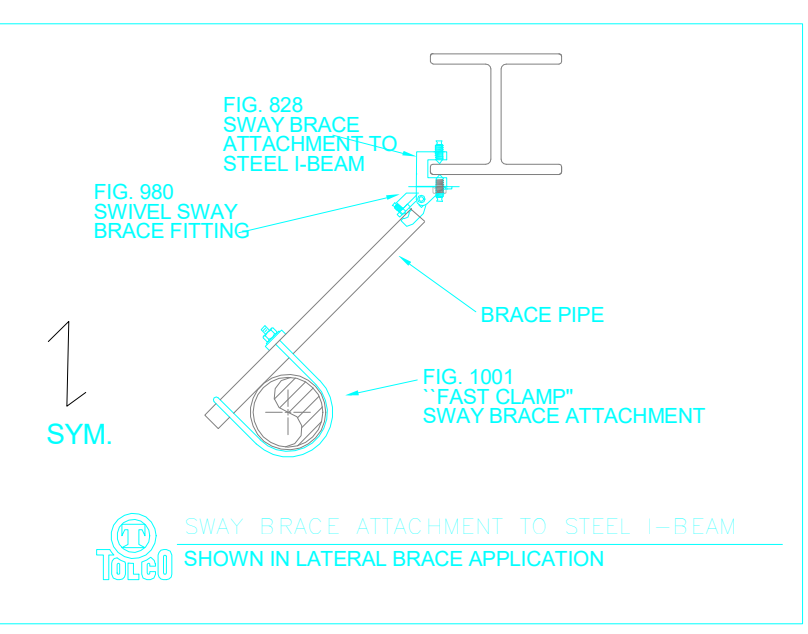
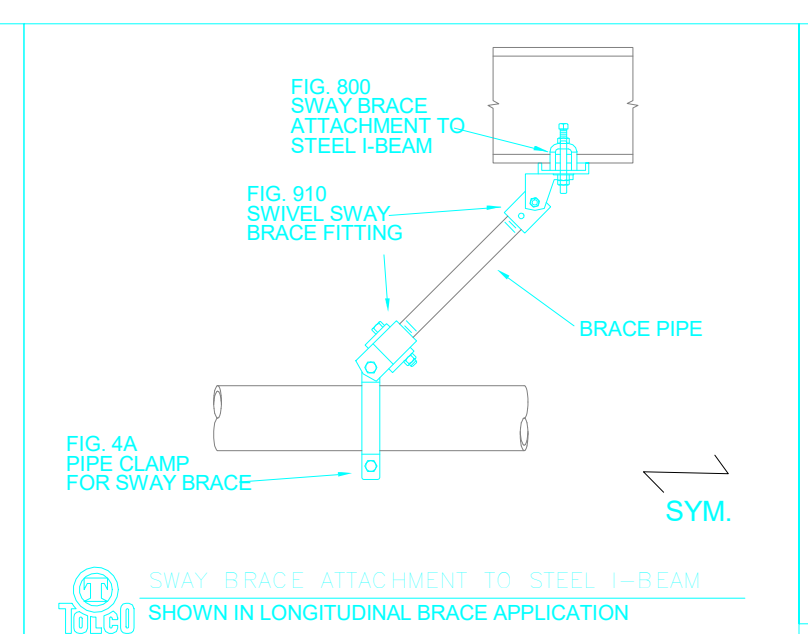
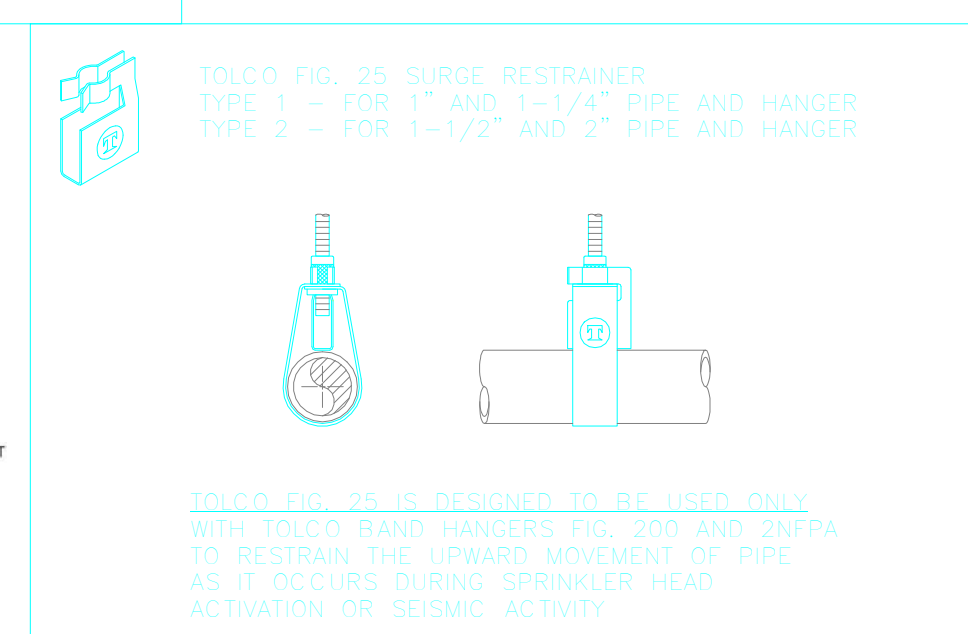
Department of Veterans Affairs

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



FLEXHEAD MODEL 2036 X 1/2\"/>

FLEXHEAD MODEL 2036 X 1/2\"/>



REMOTE AREA 1, 2ND FLOOR TYP. W/ 1ST FLOOR DESIGN IS LIGHT HAZARD PER NFPA 13, 2013 EDITION PENDANT SPRINKLERS MAKE USE OF 1\"/>

1 2nd Floor Piping Plan
 FP3.1 SCALE: 1/8\"/>

Revisions:	Date
FINAL BID DOCUMENTS (14-251)	4/14/16
100% CONSTRUCTION DOCUMENTS (14-248)	01/22/16
100% DESIGN DEVELOPMENT (14-244)	10/23/15
50% DESIGN DEVELOPMENT (14-233)	8/21/15
100% SCHEMATIC DESIGN (14-185)	3/6/15

CONSULTANTS:

10500 Old Riverdale Road
 Sacramento, CA 95827-2903
 Phone: (916) 365-4458
 Fax: (916) 365-4459
 www.saceng.com

KEY PLAN

STAMP

ARCHITECT/ENGINEERS:

ADVANCE DESIGN CONSULTANTS, INC.

998 PARK AVENUE SAN JOSE CALIFORNIA 95126
 P: (408) 287-1881 F: (408)294-3186 www.adcengineers.com

ATTENTION:
 ONLY WET SIGNED DOCUMENTS CONSTITUTE ADVANCE DESIGN CONSULTANTS, INC. PROFESSIONAL WORK AND NEITHER OTHER REPRESENTATIVE DOCUMENTS NOR BE ALTERED WITHOUT THE CONSENT OF ADVANCE DESIGN CONSULTANTS, INC. THE WET SIGNED DOCUMENTS MUST BE REFERRED TO FOR THE ORIGINAL AND CORRECT INFORMATION. IF THERE ARE ANY DIFFERENCES BETWEEN THE WET SIGNED DOCUMENTS AND ANY OTHER DOCUMENTS, THE WET SIGNED DOCUMENTS SHALL GOVERN.
 ADVANCE DESIGN CONSULTANTS, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO OUR DOCUMENTS BY ANYONE OTHER THAN AUTHORIZED REPRESENTATIVES OF ADVANCE DESIGN CONSULTANTS, INC.
 POK 13-308-38

Drawing Title:
2nd FLOOR PIPING PLAN

Approved: Project Director

Project Title:
CONSTRUCT PRIMARY CARE SERVICES BLDG.

Location:
10535 HOSPITAL WAY, MATHER, CA

Date:
4/14/16

Checked:
 RH

Drawn:
 GB

Project Number:
612-400

Building Number:
642

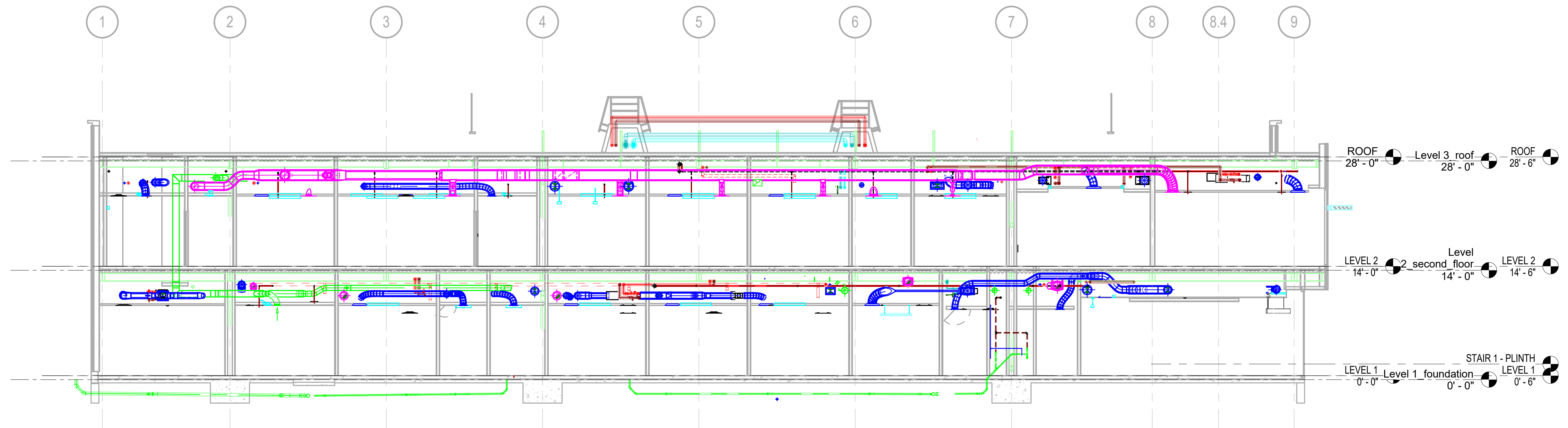
Drawing Number:
FP3.1

Dwg. of

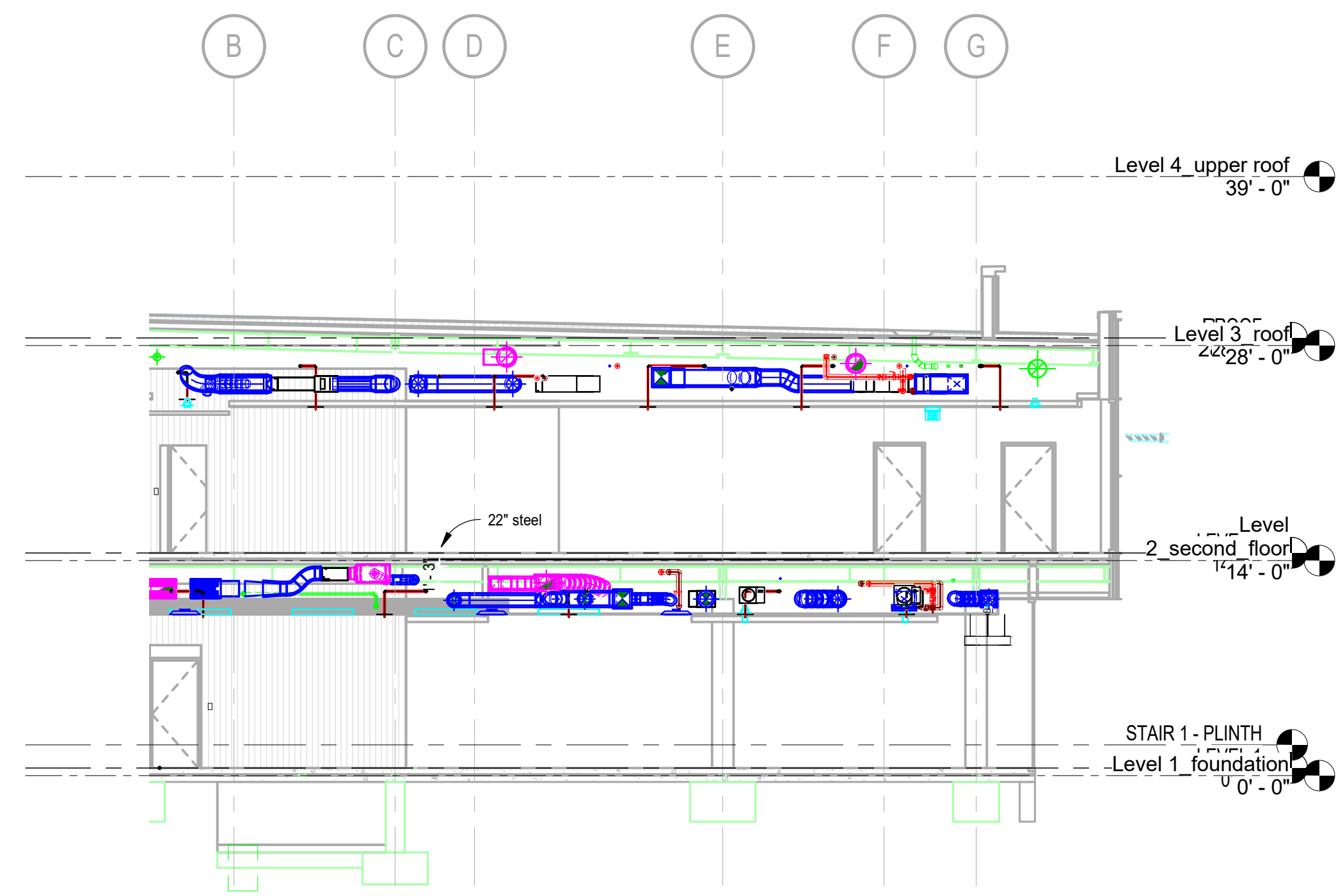
Office of Facilities Management

Department of Veterans Affairs

one eighth inch = one foot
 one quarter inch = one foot
 three eighths inch = one foot
 one half inch = one foot
 one inch = one foot
 one and one half inches = one foot
 two inches = one foot
 three quarters inch = one foot
 three quarters inch = one foot
 one and one half inches = one foot
 three inches = one foot
 three inches = one foot



2 Section 1
 FP4 SCALE: 1/8" = 1'-0"

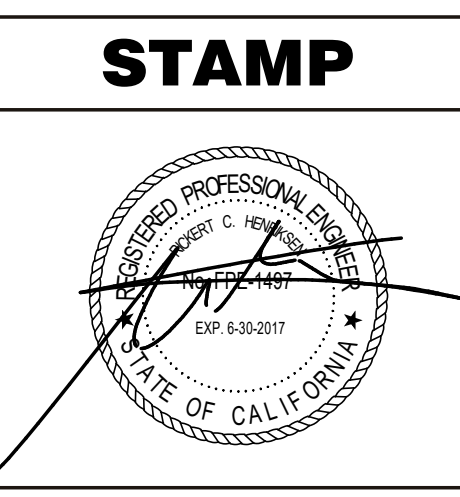
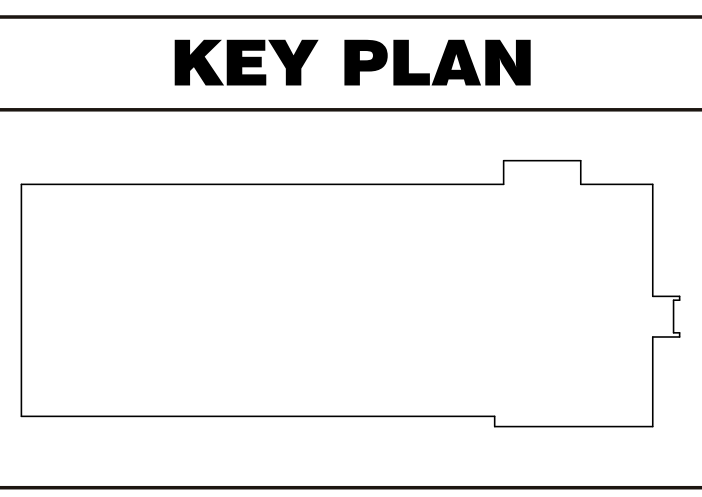


3 Section 12
 FP4 SCALE: 1/8" = 1'-0"

FINAL BID DOCUMENTS (14-251)	4/14/16
100% CONSTRUCTION DOCUMENTS (14-248)	01/22/16
100% DESIGN DEVELOPMENT (14-244)	10/23/15
50% DESIGN DEVELOPMENT (14-233)	8/21/15
100% SCHEMATIC DESIGN (14-185)	3/6/15
Revisions:	Date

CONSULTANTS:

10500 Old Placerville Road
 Sacramento, CA 95827-2003
 Phone: (916) 366-4468
 Fax: (916) 366-4469
 www.saceng.com



ARCHITECT/ENGINEERS:

998 PARK AVENUE SAN JOSE CALIFORNIA 95126
 P: (408) 287-1881 F: (408)294-3186 www.adcengineers.com

ATTENTION:

ONLY WET SIGNED DOCUMENTS CONSTITUTE ADVANCE DESIGN CONSULTANTS, INC. PROFESSIONAL WORK AND BECAUSE OTHER RESPONSIBLE DOCUMENTS MAY BE EASILY ALTERED WITHOUT THE CONSENT OF ADVANCE DESIGN CONSULTANTS, INC., THE WET SIGNED DOCUMENTS MUST BE REFERRED TO FOR THE ORIGINAL AND CORRECT INFORMATION. IF THERE ARE ANY DIFFERENCES BETWEEN THE WET SIGNED DOCUMENTS AND ANY OTHER DOCUMENTS, THE WET SIGNED DOCUMENTS SHALL GOVERN.

ADVANCE DESIGN CONSULTANTS, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO OUR DOCUMENTS BY ANYONE OTHER THAN AUTHORIZED REPRESENTATIVES OF ADVANCE DESIGN CONSULTANTS, INC.

PO# 13-308-38

Drawing Title:

SECTIONS AND DETAILS

Approved: Project Director

Project Title:

CONSTRUCT PRIMARY CARE SERVICES BLDG.

Location:

10535 HOSPITAL WAY, MATHER, CA

Date	Checked	Drawn
4/14/16	RH	GB

Project Number:	612-400
Building Number:	642
Drawing Number:	FP4
Dwg. of	

Office of Facilities Management

Department of Veterans Affairs

Tol-Brace Seismic Calculations		
Project Address: VA, Primary Care Mather Field Sacramento, Ca.		Sacramento Engineering Co 10555 Old Placerville Rd. Sacramento, Ca. 95820 916-368-4468 FP1497
Job # _____		Calculations based on 2013 NFPA Pamphlet #13
Brace Information		Tolco Brace Components
Maximum Spacing	32' 0" (9.75 m)	Tolco Component Fig. Number
Maximum Brace Length	7' 0" (2.13 m)	Fig. 1001 Clamp
Bracing Material	1" Sch.40	Fig.909 No-Thread Swivel
Angle from Vertical	60° Min.	Adjusted Load
Least Rad. of Gyration	0.42" (11 mm)	1745 lbs (792 kg)
L/R Value	200	1745 lbs (792 kg)
Max Horizontal Load	1604 lbs (728 kg)	
Force Factor (Cp)	0.5	
Fastener Information		Assembly Detail *Calculations Based on CONCENTRIC Loading *Please Note: These calculations are for Tolco components only. Use of any other components voids these calculations and the listing of the assembly.
Fastener Orientation	NFPA Type C	Brace Identification on Plans SB1 Orientation of Brace Lateral
Maximum Load	1745 lbs (792 kg)	
Diameter	N/A	
Length	N/A	
Type	1 in. WU Across Beam	
Load Information		
Braced Pipe: 4" Sch.10 Steel Pipe		
Size and Type of Pipe	Total Length	Total Calculated Load
4" Sch 10 Steel Pipe (101.6 mm)	328' (100 m)	188 lbs (85 kg)
1.25" Sch.7 Steel Pipe (31.75 mm)	304ft (117 m)	300 lbs (170 kg)
1" Sch 10 Steel Pipe (25.4 mm)	50ft (15.2 m)	45 lbs (20 kg)
Percentage added for Fittings and Sprinklers	15%	83 lbs (42.18 kg)
Total Adjusted Load of all pipe within Zone of Influence		715 lbs (324 kg)

Tol-Brace Seismic Calculations		
Project Address: VA, Primary Care Mather Field Sacramento, Ca.		Sacramento Engineering Co 10555 Old Placerville Rd. Sacramento, Ca. 95820 916-368-4468 FP1497
Job # _____		Calculations based on 2013 NFPA Pamphlet #13
Brace Information		Tolco Brace Components
Maximum Spacing	40' 0" (12.19 m)	Tolco Component Fig. Number
Maximum Brace Length	7' 0" (2.13 m)	Fig. 4L Clamp
Bracing Material	1" Sch.40	Fig.909 No-Thread Swivel
Angle from Vertical	60° Min.	Adjusted Load
Least Rad. of Gyration	0.42" (11 mm)	1745 lbs (792 kg)
L/R Value	200	1745 lbs (792 kg)
Max Horizontal Load	1604 lbs (728 kg)	
Force Factor (Cp)	0.5	
Fastener Information		Assembly Detail *Calculations Based on CONCENTRIC Loading *Please Note: These calculations are for Tolco components only. Use of any other components voids these calculations and the listing of the assembly.
Fastener Orientation	NFPA Type C	Brace Identification on Plans SB2 Orientation of Brace Longitudinal
Maximum Load	1745 lbs (792 kg)	
Diameter	N/A	
Length	N/A	
Type	Fig.800 Across Beam	
Load Information		
Braced Pipe: 4" Sch.10 Steel Pipe		
Size and Type of Pipe	Total Length	Total Calculated Load
4" Sch 10 Steel Pipe (101.6 mm)	40ft (12.2 m)	236 lbs (107 kg)
Percentage added for Fittings and Sprinklers	15%	35 lbs (15.88 kg)
Total Adjusted Load of all pipe within Zone of Influence		271 lbs (123 kg)

FINAL BID DOCUMENTS (14-251)	4/14/16
100% CONSTRUCTION DOCUMENTS (14-248)	01/22/16
100% DESIGN DEVELOPMENT (14-244)	10/23/15
50% DESIGN DEVELOPMENT (14-233)	8/21/15
100% SCHEMATIC DESIGN (14-185)	3/6/15
Revisions:	Date

CONSULTANTS:

10555 Old Placerville Road
 Sacramento, CA 95820-2003
 Phone: (916) 368-4468
 Fax: (916) 368-4469
 www.seacog.com

KEY PLAN

STAMP

ARCHITECT/ENGINEERS:

ATTENTION:
 ONLY WET SIGNED DOCUMENTS CONSTITUTE ADVANCE DESIGN CONSULTANTS, INC. PROFESSIONAL WORK AND BECAUSE OTHER RESPONSIBLE DOCUMENTS MAY BE EASILY ALTERED WITHOUT THE CONSENT OF ADVANCE DESIGN CONSULTANTS, INC., THE WET SIGNED DOCUMENTS MUST BE REFERRED TO FOR THE ORIGINAL AND CORRECT INFORMATION. IF THERE ARE ANY DIFFERENCES BETWEEN THE WET SIGNED DOCUMENTS AND ANY OTHER DOCUMENTS, THE WET SIGNED DOCUMENTS SHALL GOVERN.
 ADVANCE DESIGN CONSULTANTS, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO THESE DOCUMENTS BY ANYONE OTHER THAN AUTHORIZED REPRESENTATIVES OF ADVANCE DESIGN CONSULTANTS, INC.
 998 PARK AVENUE SAN JOSE CALIFORNIA 95128
 P: (408) 287-1881 F: (408)294-3186 www.adcengineers.com
 PO# 13-308-38

Drawing Title:
 BRACE DETAILS

Approved: Project Director

Project Title:
 CONSTRUCT PRIMARY CARE SERVICES BLDG.

Location:
 10535 HOSPITAL WAY, MATHER, CA

Date: 4/14/16

Checked: RH

Drawn: GB

Project Number:
 612-400

Building Number:
 642

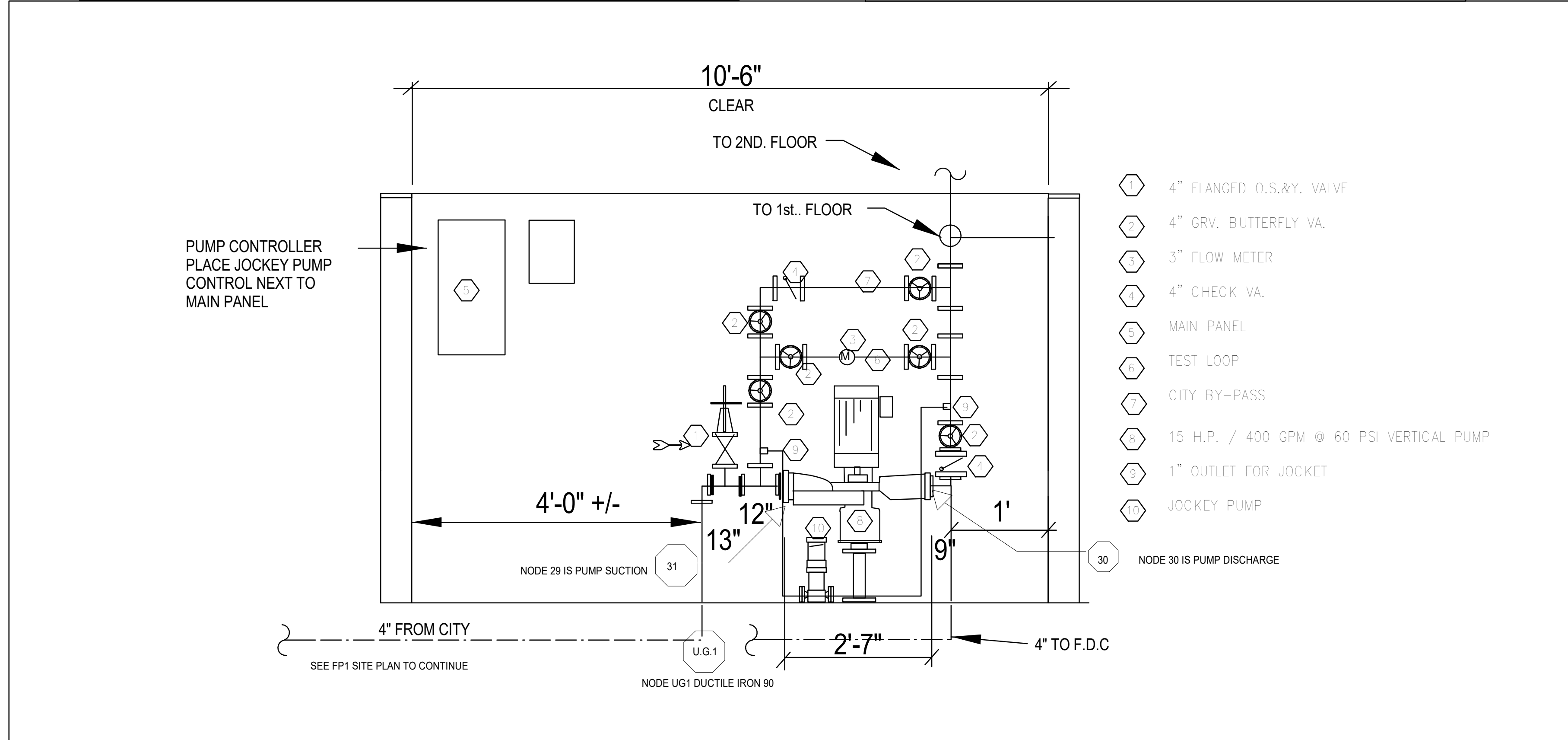
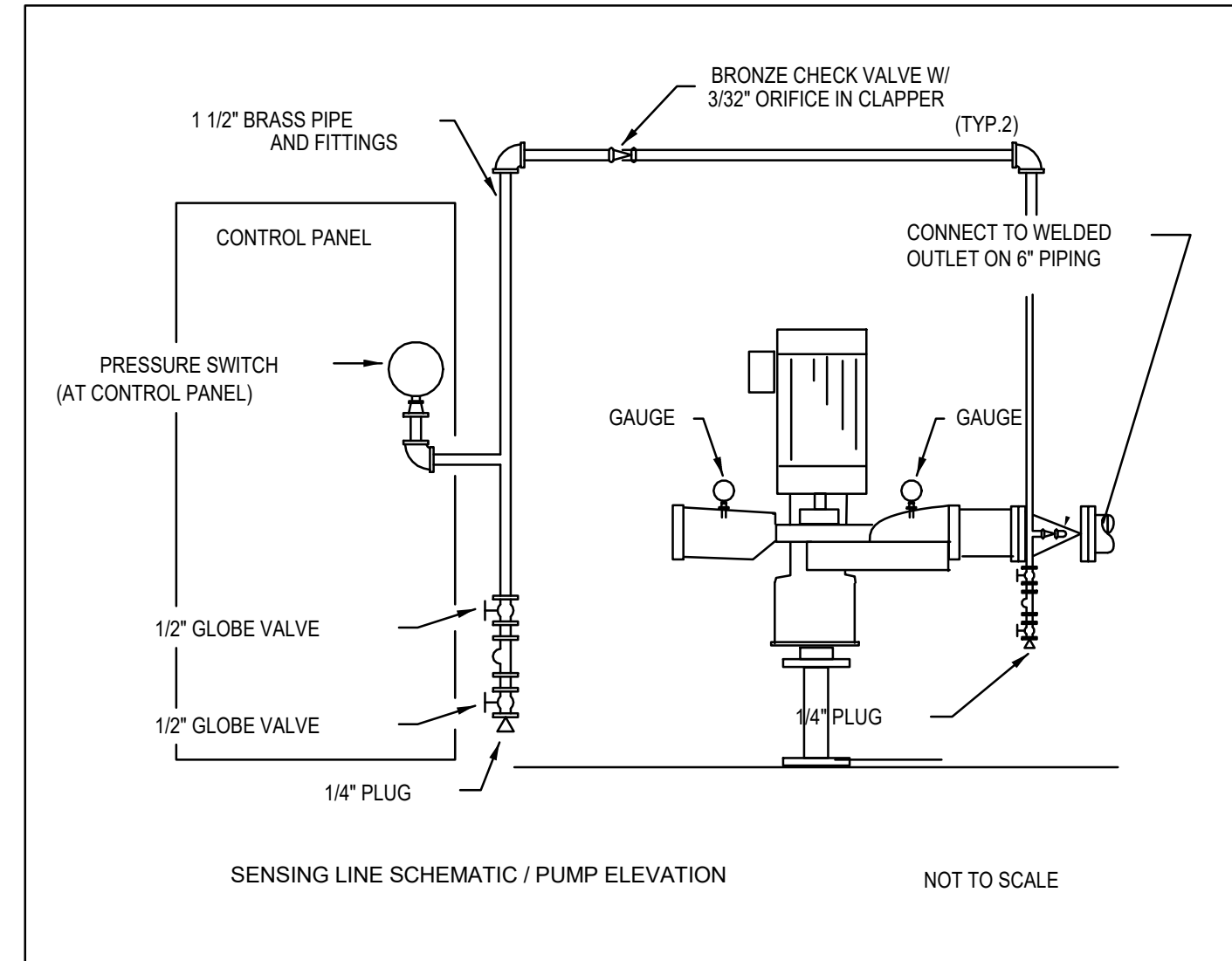
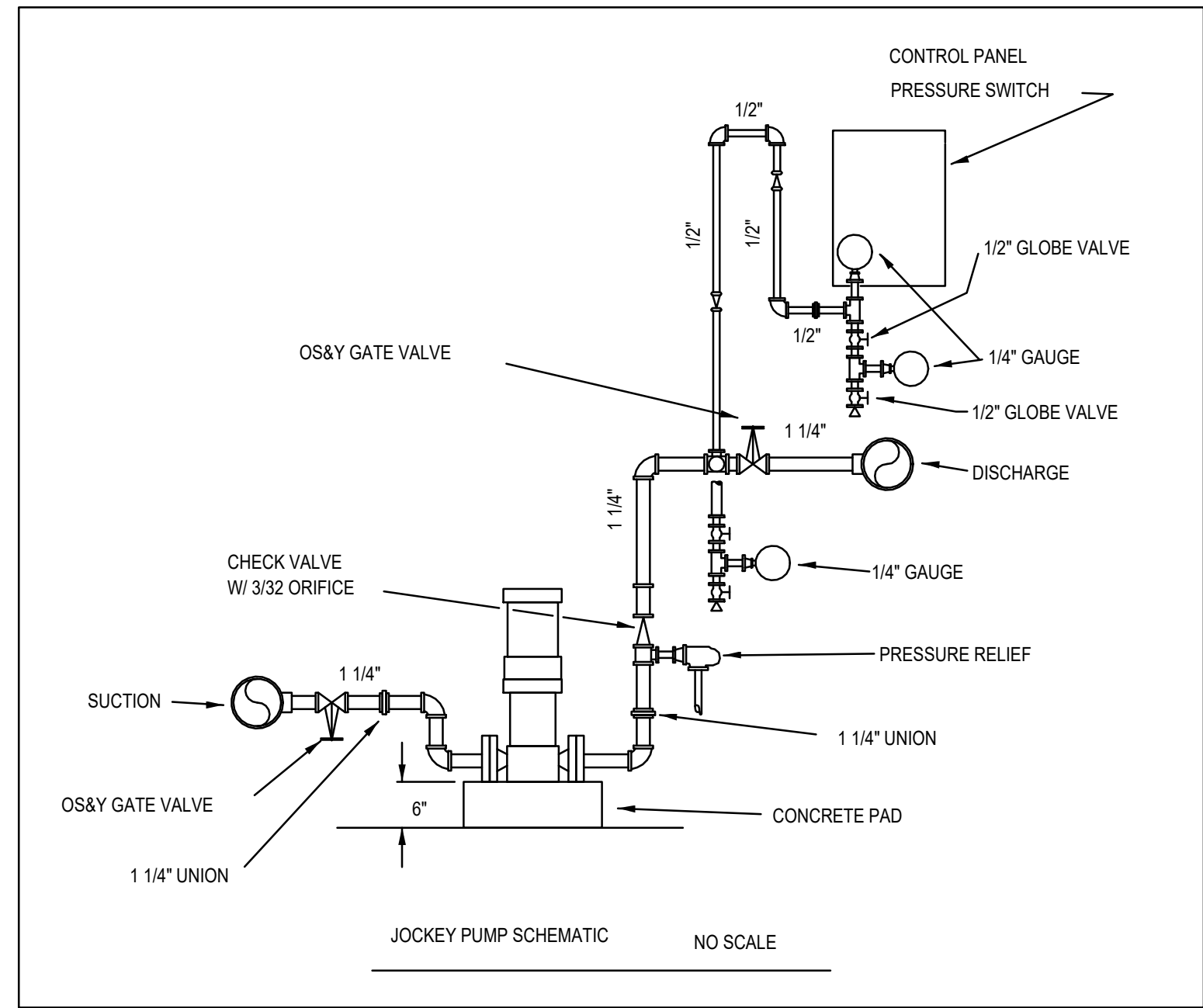
Drawing Number:
 FP5

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



1 Fire Pump
FP6
SCALE: 1/4" = 1'-0"

CONSULTANTS: 10500 Old Placerville Road Sacramento, CA 95827-2903 Phone: (916) 365-4468 Fax: (916) 365-4469 www.saceng.com		KEY PLAN 		STAMP 		ARCHITECT/ENGINEERS: ATTENTION: <small>ONLY WET SIGNED DOCUMENTS CONSTITUTE ADVANCE DESIGN CONSULTANTS, INC. PROFESSIONAL WORK AND BECAUSE OTHER RESPONSIBLE DOCUMENTS MAY BE EASILY ALTERED WITHOUT THE CONSENT OF ADVANCE DESIGN CONSULTANTS, INC., THE WET SIGNED DOCUMENTS MUST BE REFERRED TO FOR THE ORIGINAL AND CORRECT INFORMATION. IF THERE ARE ANY DIFFERENCES BETWEEN THE WET SIGNED DOCUMENTS AND ANY OTHER DOCUMENTS, THE WET SIGNED DOCUMENTS SHALL GOVERN.</small> ADVANCE DESIGN CONSULTANTS, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO OUR DOCUMENTS BY ANYONE OTHER THAN AUTHORIZED REPRESENTATIVES OF ADVANCE DESIGN CONSULTANTS, INC. 998 PARK AVENUE SAN JOSE CALIFORNIA 95126 P: (408) 287-1881 F: (408)294-3186 www.adcengineers.com PO# 13-308-38		Drawing Title: FIRE PUMP Approved: Project Director		Project Title: CONSTRUCT PRIMARY CARE SERVICES BLDG. Location: 10535 HOSPITAL WAY, MATHER, CA		Project Number: 612-400 Building Number: 642 Drawing Number: FP6 Dwg. of		Office of Facilities Management 	
Revisions:		Date		Revisions:		Date		Date: 4/14/16		Checked: RH		Drawn: GB			