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Revisions
07-18-07 DESIGN DEVELOPMENT
08-23-07 CONSTRUCTION DOCUMENTS

Sheet
FIRE PROTECTION COVER SHEET

Project
Landmark Healthcare
Facilities LLC

Fore River Medical
Pavillon
Portland, Maine

Date
August 23, 2007

Project No.
07-5198

Sheet No.
FP-1.0

Frank Lorenz
PROFESSIONAL ENGINEER
NO. WA 7907

FIRE PROTECTION SYMBOLS

(NOT ALL SYMBOLS ARE NECESSARILY USED ON THIS PROJECT)

—	EXISTING PIPING
—	NEW PIPING
-x-x-x-x-x-	EXISTING PIPING TO BE REMOVED
○	EXISTING SPRINKLER HEAD
⊗	EXISTING SPRINKLER HEAD TO BE REMOVED
●	NEW CONCEALED SPRINKLER HEAD
⊙	NEW PENDENT SPRINKLER HEAD
▲	NEW UPRIGHT SPRINKLER HEAD
▲	NEW SIDE WALL SPRINKLER HEAD
()	EXTEND EXISTING SPRINKLER PIPING TO NEW SPRINKLER HEAD
FE	FIRE EXTINGUISHER IN CABINET
TE	FIRE EXTINGUISHER WALL HUNG
⊕	HYDRAULIC REFERENCE POINT
⊕	SPRINKLER CONTROL VALVE
—○	PIPE UP/RISE
—○	PIPE DN/DROP
—○	CONNECT TO EXISTING
—○	DISCONNECT FROM EXISTING
FHV	FIRE HOSE VALVE
FSP	FIRE STANDPIPE
SPKR	SPRINKLER
U.O.N.	UNLESS OTHERWISE NOTED

FIRE PROTECTION GENERAL NOTES:

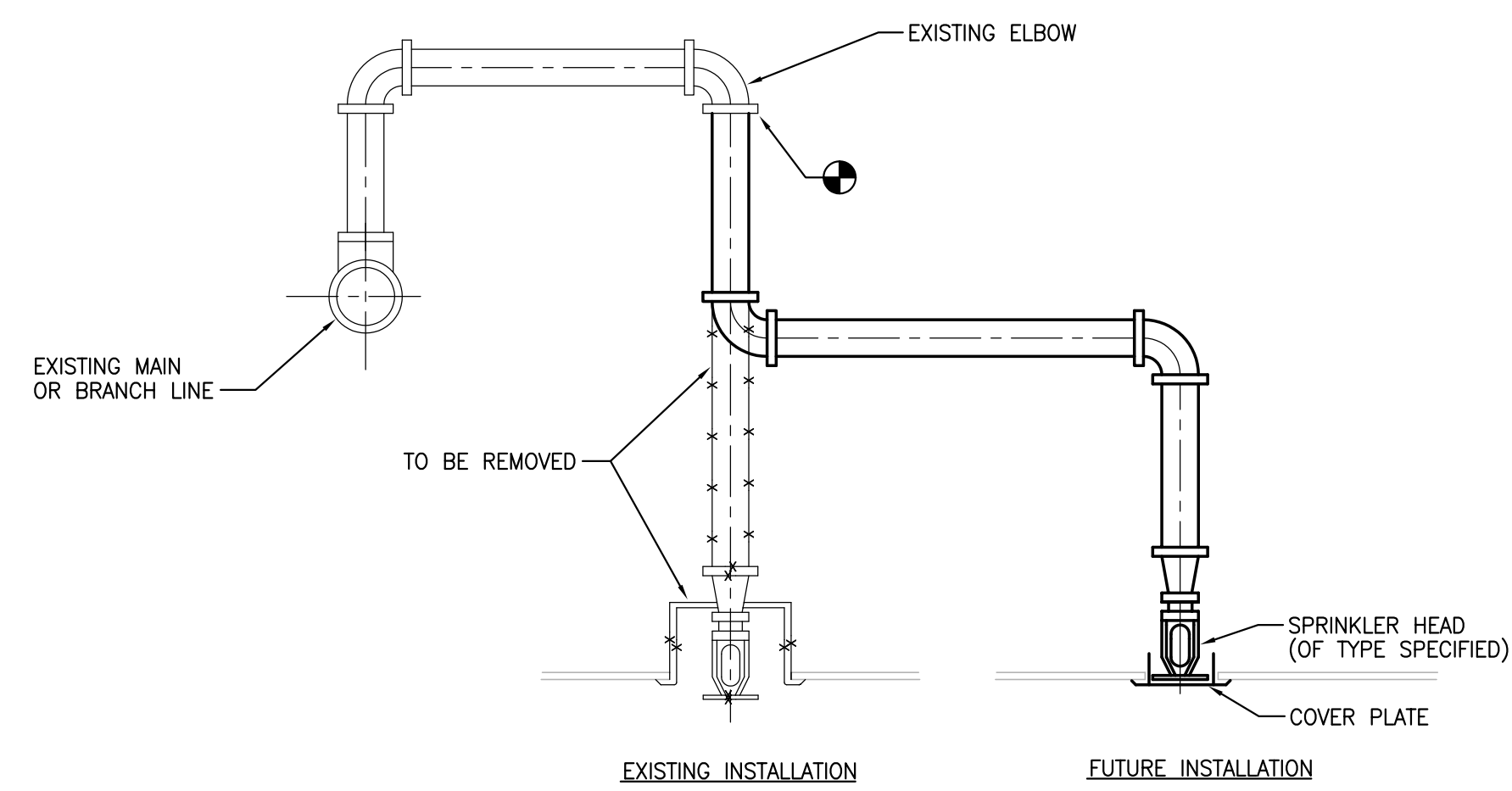
- PROVIDE WET-PIPE SPRINKLERS IN ALL AREAS. PROVIDE DRY-TYPE SPRINKLER SYSTEM IN ALL AREAS WHERE AMBIENT TEMPERATURE IS 40 DEG F OR BELOW.
- SECURE WATER FLOW TEST DATA TAKEN FROM FIRE HYDRANTS NEAREST SITE. IF RECENT FLOW TEST DATA IS NOT AVAILABLE FROM CITY RECORDS, MAKE NECESSARY TESTS AS REQUIRED BY NFPA STANDARDS TO DETERMINE CHARACTER OF WATER SUPPLY. MINIMUM OF 20 PSI DROP IN PRESSURE BETWEEN STATIC AND RESIDUAL PRESSURE SHALL BE REQUIRED IN ORDER TO OBTAIN ACCURATE DATA.
- SPRINKLER SYSTEM SHALL BE HYDRAULICALLY CALCULATED FOR LIGHT HAZARD OCCUPANCY EXCEPT AS NOTED.
- SPRINKLERS FOR GENERAL AREAS SHALL BE TYPE AS SCHEDULED, 165 DEG F RATED, HYDRAULICALLY DESIGNED TO PROVIDE 0.10 GPM/SQ FT OVER MOST REMOTE 1500 SQ FT PLUS 50 GPM FOR HOSE STREAM. MAXIMUM PROTECTION AREA PER SPRINKLER SHALL BE 225 SQ FT. ROOM DESIGN METHOD ACCEPTABLE.
- SPRINKLERS IN STORAGE SPACES, LABORATORIES, MECHANICAL SPACES AND OTHER ORDINARY HAZARD SPACES SHALL BE HYDRAULICALLY DESIGNED TO PROVIDE 0.15 GPM/SQ FT OVER MOST REMOTE 2000 SQ FT PLUS 250 GPM FOR HOSE STREAM. MAXIMUM PROTECTION AREA PER SPRINKLER SHALL BE 130 SQ FT.
- ADD 10% CONTINGENCY FACTOR TO HYDRAULIC CALCULATIONS.
- EXACT LOCATION OF SPRINKLER HEADS IN FINISHED AREAS WITH SUSPENDED CEILING SHALL BE AS INDICATED ON REFLECTED CEILING PLANS.
- MINIMUM PRESSURE AT END SPRINKLER HEAD 7 PSI.
- EQUIVALENT FITTING LENGTHS USED IN HYDRAULIC CALCULATIONS SHALL BE IN ACCORDANCE WITH NFPA STANDARD NO. 13 AND FACTORY MUTUAL 0.5 2-8N.
 - WHEREVER FITTINGS ARE USED IN CONJUNCTION WITH LIGHTWALL PIPE, EQUIVALENT FITTING LENGTHS INDICATED IN NFPA-13 SHALL BE INCREASED BY 39%.
- MAXIMUM FLOW VELOCITY SHALL NOT EXCEED 32 F.P.S.
- ALL AUTOMATIC SPRINKLER HEADS, PIPE FITTINGS, PIPE HANGERS, AUTOMATIC CONTROL VALVES AND MANUAL CONTROL VALVES SHALL BEAR FACTORY MUTUAL APPROVAL AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- ALL EXPOSED PIPE, FITTINGS, HANGERS AND SUPPLEMENTARY STEEL SHALL BE PAINTED.
- ENDS OF ALL CROSS MAINS SHALL BE PROVIDED WITH THREADED FLUSHING CONNECTION NO MORE THAN 2 INCHES IN DIAMETER.
- PROVIDE AUXILIARY DRAINS FOR ALL BELOW DUCT SPRINKLERS AND OTHER TRAPPED SECTIONS. PIPING TO ONE SINGLE SPRINKLER IS EXCLUDED.
- PROVIDE FLUSHING CONNECTIONS WHERE REQUIRED BY NFPA AND F.M.
- COORDINATE WITH OWNER FOR ALL SHUTDOWNS.
- PROVIDE TEST CONNECTIONS AT HIGHEST POINT OF MAIN PORTION OF EACH SPRINKLER SYSTEM, WITH 1" PIPE AND VALVE. TEST PIPE SHALL BE CONNECTED TO SPRINKLER PIPE AT LEAST 1-1/4" IN SIZE AND SHALL DISCHARGE OUTSIDE BUILDING OR THROUGH 1/2" SMOOTH BORE BRASS OUTLET, WHERE IT CAN BE EASILY SEEN.
- PROVIDE ADDITIONAL HEADS UNDER DUCTWORK LARGER THAN 48" WIDE.
- WATER SUPPLY INFORMATION TO BE VERIFIED BY FLOW TEST.
 - STATIC PRESSURE:
 - RESIDUAL PRESSURE:
 - FLOW:
 - ELEVATION:

SPRINKLER HEAD SCHEDULE

TYPE	DESIGNATION	UPRIGHT	PENDENT	FLUSH PLATE SPRK.	RECESSED	SIDEWALL (CHROME FINISH)	SIDEWALL (NATURAL BRONZE FINISH)	FLUSH PENDENT	DRY	QUICK RESPONSE	EXTENDED COVERAGE	EXIST SPR. HD. TO BE REMOVED/RELOCATED	EXIST SPRINKLER HD	MANUFACTURER					REMARKS			
														CENTRAL	RELIABLE	GRINNELL	STAR	Viking				
														MODEL NUMBER								
	○												●									
	⊗																					
	●				●												F4FR					K=5.6, 1/2" ORIFICE 165°F RATING
	▲					●											H-1					165 DEG
	▲						●										GB-QR					K=5.6, 1/2" ORIFICE 165°F RATING
	○	●															A					
	○	●															GB					K=5.6, 1/2" ORIFICE 165°F RATING
	▲		●														GB-QR					
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NOTES:

- EXPOSED UPRIGHT HEADS IN OCCUPIED SPACES SHALL BE CHROME FINISH.
- PROVIDE ESCUTCHEONS WHEN PENETRATING EXPOSED WALL.
- PROVIDE SPRINKLER GUARDS AT ALL HEADS 7'-0" AND LOWER.
- COLOR SELECTION BY ARCHITECT.



TYPICAL SPRINKLER RELOCATION

0 1/8" 1/4" 1/2" 3/4" 1" 2" 3" 5"

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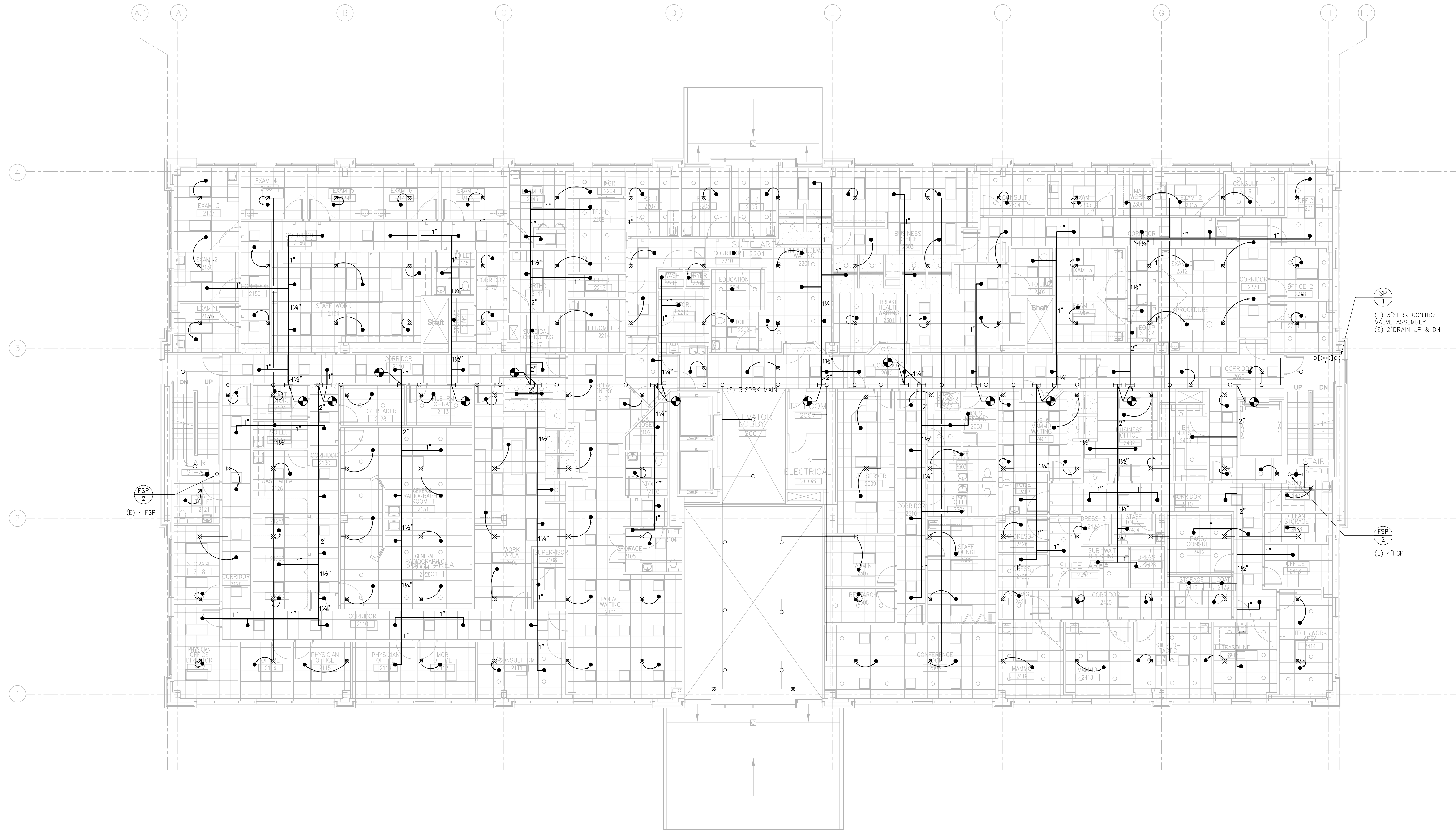
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1 SECOND FLOOR PLAN
SCALE: 1/8"=1'-0"

Sheet FIRE PROTECTION SECOND FLOOR PLAN

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