

IF THIS SHEET IS NOT 30" x 42"  
FULL SIZE, USE GRAPHIC SCALES

one inch = one foot

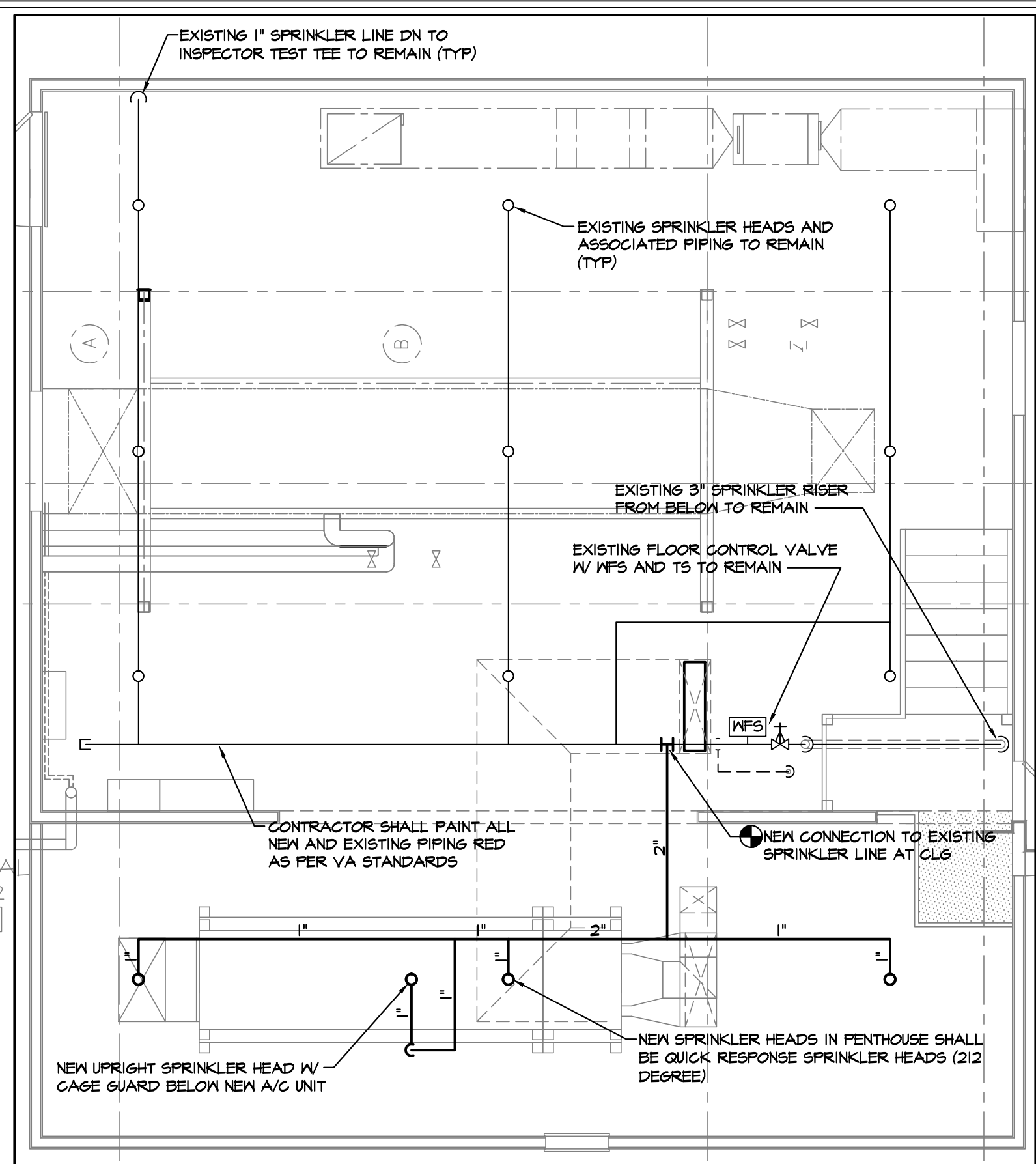
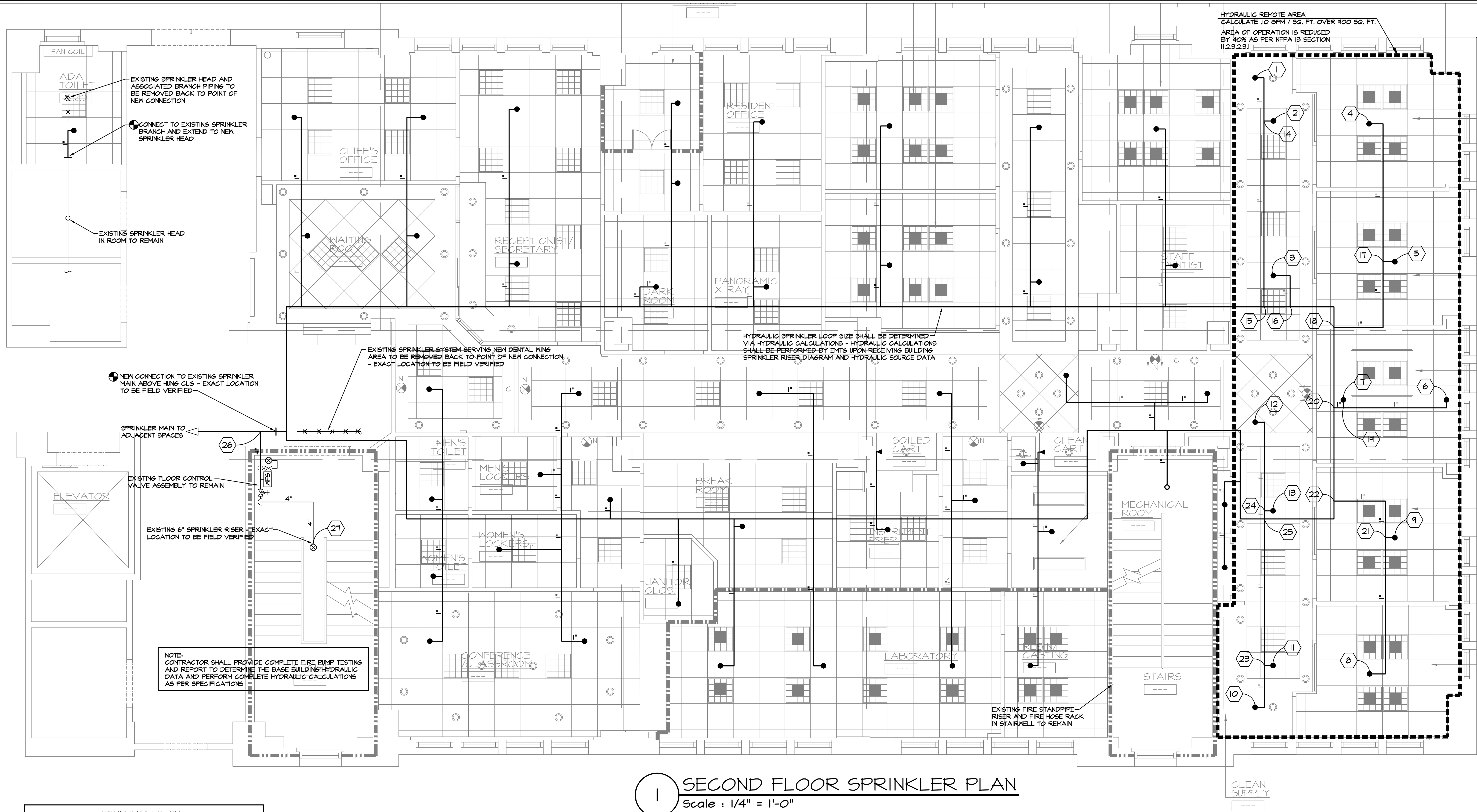
three-quarter inch = one foot

one-half inch = one foot

three-eighths inch = one foot

one-quarter inch = one foot

one-eighth inch = one foot



**2 MECHANICAL PENTHOUSE PART PLAN**  
Scale : 1/4" = 1'-0"

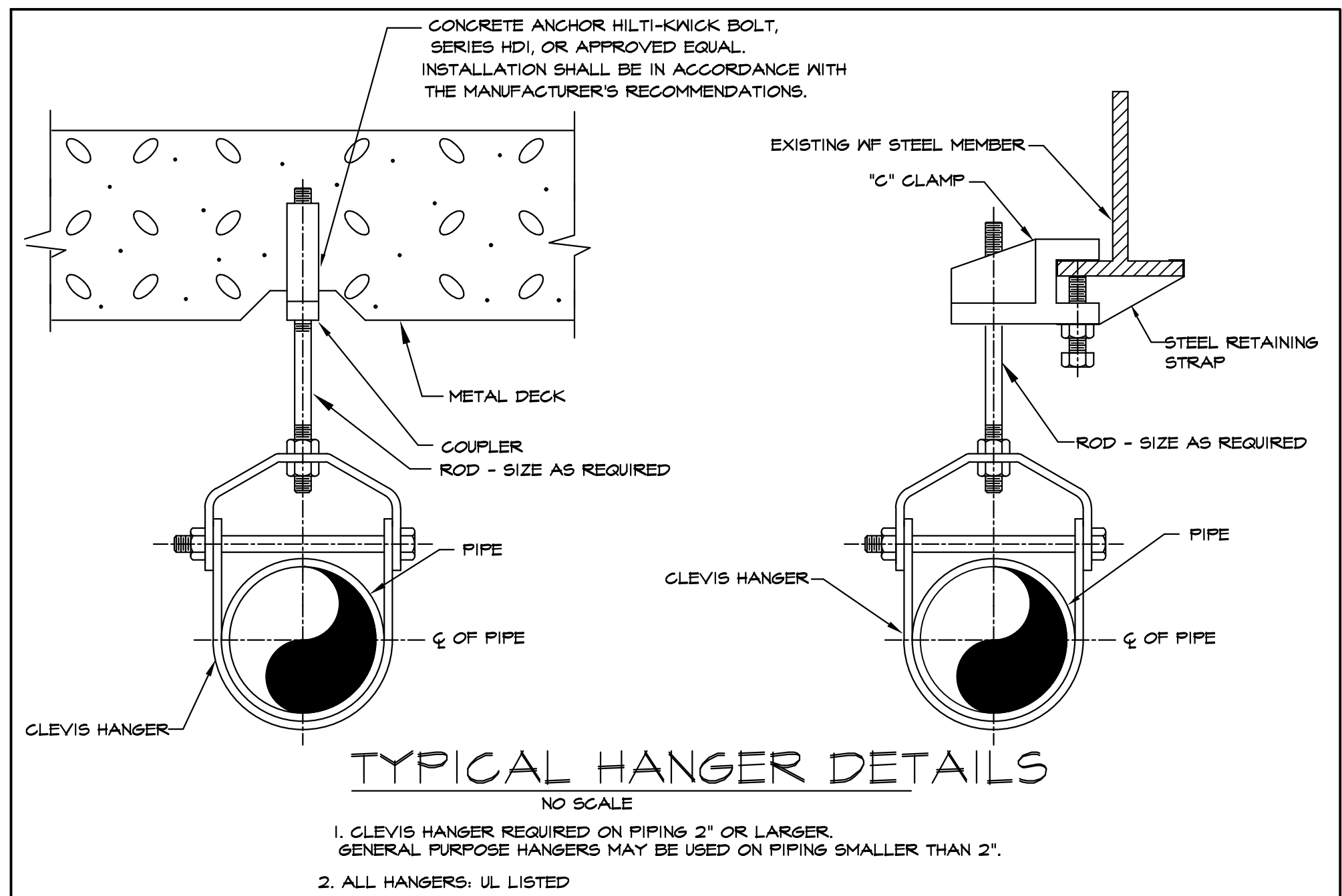
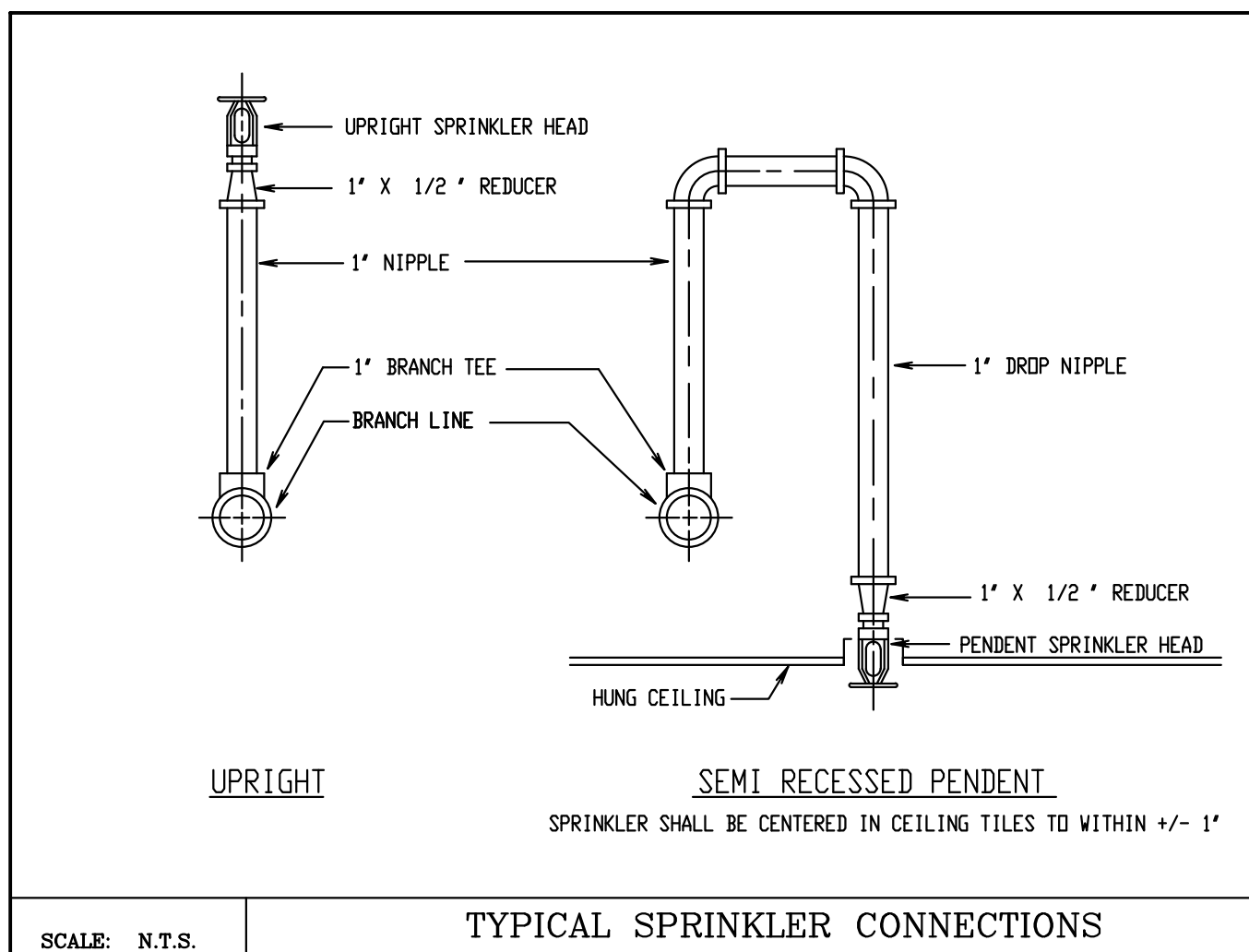
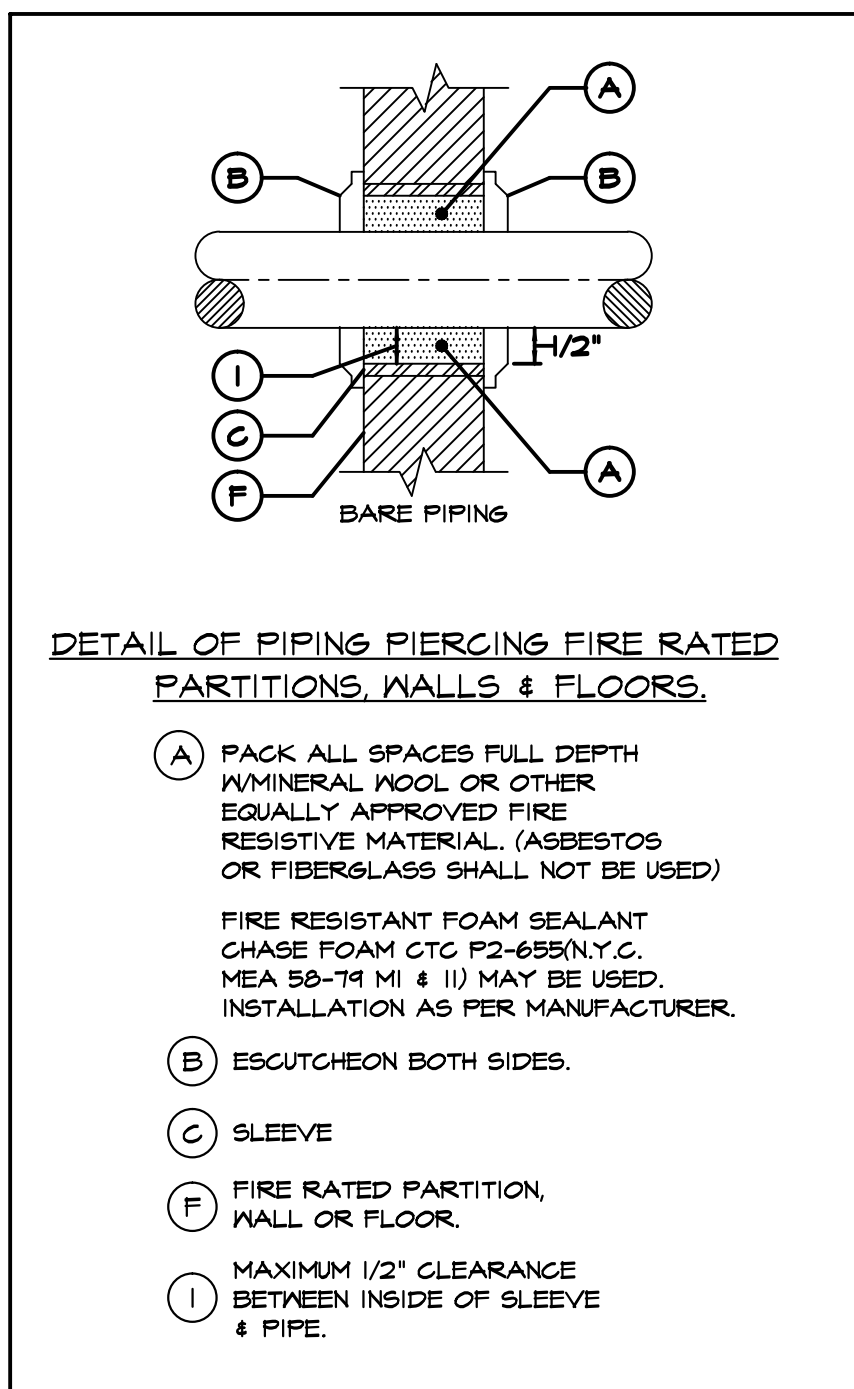
**SPRINKLER LEGEND**

- NEW SPRINKLER PIPING
- NEW SEMI RECESSED QUICK RESPONSE SPRINKLER HEAD (55 DEGREE)
- QUICK RESPONSE SIDEWALL SPRINKLER HEAD (55 DEGREE)
- NEW OS&Y VALVE W/TAMPER SWITCH
- NEW WATER FLOW SWITCH (WFS)
- HYDRAULIC DESIGN NODE POINT
- CONNECT TO EXISTING

**AUTOMATIC SPRINKLER SYSTEM DESIGN CRITERIA**

AREA OF APPLICATION, DENSITY REQUIREMENTS AND FLOW COEFFICIENT FACTORS:

- LIGHT HAZARD AREAS (OFFICE SPACE, CORRIDORS, ECT.)  
CALCULATE 0.10 GPM / SQ. FT. OVER 1500 SQ. FT.  
MAXIMUM SQ. FT. / SPRINKLER HEAD = 225 SQ. FT.
- ORDINARY HAZARD GRP 1 AREAS (MECHANICAL ROOMS, ECT.)  
CALCULATE 0.16 GPM / SQ. FT. OVER 1500 SQ. FT.  
MAXIMUM SQ. FT. / SPRINKLER HEAD = 150 SQ. FT.
- ORDINARY HAZARD GRP 2 AREAS (LABS, LAB SUPPORT, ECT.)  
CALCULATE 0.20 GPM / SQ. FT. OVER 1500 SQ. FT.  
MAXIMUM SQ. FT. / SPRINKLER HEAD = 150 SQ. FT.
- DO NOT EXCEED 20/SEC VELOCITY IN ANY PIPE
- HYDRAULIC CALCULATIONS SHALL INCLUDE A SAFETY FACTOR OF 3 PSI OR 12% OF DEMAND PRESSURE WHICHEVER IS GREATER, AT THE POINT OF CONNECTION TO MAINLINE WATER SUPPLY.
- PROVIDE SPRINKLERS AS REQUIRED BELOW OBSTRUCTIONS SUCH AS DUCTWORK, HVAC EQUIPMENT AND CONDUITS IN AREAS WITH NO HUNG CEILING. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS AND LOCATE SPRINKLERS ACCORDING TO FINAL LAYOUT.
- INSTALL SEISMIC SHAY BRACINGS IN ACCORDANCE WITH APPROPRIATE SEISMIC ZONE.



**SMOKE & FIRE RATING LEGEND**

EXISTING SMOKE RATED BARRIER (30 MIN RATING) .....

NEW FIRE RATED BARRIER (1 HR RATING) .....

EXISTING FIRE RATED BARRIER (2 HR RATING) .....

**EMTG**  
Consulting Engineers

TEL: 212-268-6465 FAX: 212-268-6467

115 WEST 30TH STREET, SUITE 202, NEW YORK, NY 10001



Revisions  
VA FORM 08-6231, DEC 1989

**KIR**  
KENNETH IRVING, ARCHITECT P.C.

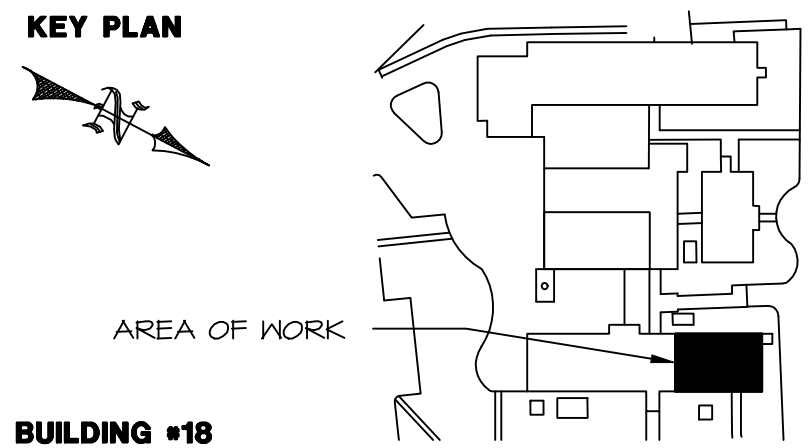
42 MEMORIAL PLAZA, SUITE 301, PLEASANTVILLE, N.Y. 10570

PHONE: (914) 747-0002 E-MAIL: kmandrade@kierch.com FAX: (914) 747-9211

NOTE AND READ CAREFULLY:

The Contractor shall consult and study the requirements of each and every drawing and each specification section of this contract so that he/she may become acquainted with the project as a whole in order to determine how the work of his/her subcontractor or vendor may affect the work required under this contract.

Written Specifications are part of this contract



Drawing Title  
**2ND FLOOR AND PENTHOUSE SPRINKLER PLANS**

Approved: Division Chief

Approved: Service Director

Project Title  
**Renovation to Dental Clinic Building 18 Healthcare System Castle Point, New York**

Building Number  
**18**

Checked  
**SL**

Drawn  
**WS/DH**

Location  
**Castle Point, New York**

Date  
**4/23/2012**

Project No.  
**620-A409-110**

DRAWING NO.  
**FX100**

Dwg.380f 52

**Office of Facilities**

DEBORAH T. DE WEEVER S. REEBERS

U.S. GOVERNMENT PRINTING OFFICE: 1983-400-1295