

**SCOPE OF WORK:**

- FOREST CITY FIRE PROTECTION SHALL INSTALL A WET PIPE FIRE SPRINKLER SYSTEM AT HILLCREST PUBLIC SCHOOL – 31 RENWICK AVE., CAMBRIDGE, ONTARIO. THE SCOPE OF WORK WILL BE LIMITED TO CONTRACT NUMBER CL-13-319 INCLUDING PROTECTION OF THE NEW ADDITION AND RETROFITTING THE EXISTING BUILDING. THE SYSTEM SHALL CONFORM TO NFPA 13-2010 EDITION & O.B.C. 2006 EDITION.
- FOREST CITY FIRE PROTECTION IS TO START WORK AT THE DESIGNATED TIE-IN POINTS AS SHOWN ON THE DRAWINGS.

NOTES: - TO PREVENT WET SPRINKLER PIPE FROM FREEZING, OWNER OR OCCUPANT IS RESPONSIBLE FOR SUPPLYING & MAINTAINING ADEQUATE HEAT (40°F, 4°C) TO ALL AREAS WHERE WET SPRINKLER PIPE IS INSTALLED.  
 - COORDINATE WITH ELECTRICAL FOR ELECTRICAL REQUIREMENTS.  
 - COORDINATE INTERFERENCE WITH OTHER TRADES.

**DESIGN:**

BUILDING OCCUPANCY IS AN ELEMENTARY SCHOOL.  
 NON-COMBUSTIBLE CONSTRUCTION THROUGHOUT EXISTING BUILDING AND NEW ADDITION.

**LIGHT HAZARD:** 0.10 GPM/FT² @ 1500 FT² - 100 GPM HOSE ALLOWANCE  
 OCCUPANCIES INCLUDE: CLASSROOMS, CORRIDORS, OFFICES, LIBRARY, GYM.

**ORDINARY HAZARD 1:** 0.15 GPM/FT² @ 1500 FT² - 250 GPM HOSE ALLOWANCE  
 OCCUPANCIES INCLUDE: SERVICE ROOMS, STORAGE ROOMS.

DESIGN AREA MAY BE REDUCED BASED ON CEILING HEIGHT AND USE OF QUICK RESPONSE SPRINKLERS AS PER NFPA 13, 2010 - 11.2.3.2.3.1

**WATER SUPPLY USED FOR THE HYDRAULIC CALCULATIONS:**

STATIC PRESSURE: 65 PSI  
 RESIDUAL PRESSURE: 55 PSI  
 FLOWING: 949 USCPM  
 DATE: 2013.05.02  
 LOCATION: 31 RENWICK AVE., CAMBRIDGE  
 MADE BY: F.C.F.P.

**HYDRAULIC CALCULATION INFORMATION**

REFER TO DRAWINGS FOR HYDRAULIC DESIGN INFORMATION.

**MATERIAL:**

ALL MATERIALS SHALL BE IN ACCORDANCE WITH NFPA 13 STANDARDS AND LISTED FOR FIRE PROTECTION USE.

**PIPING:** 1" TO 2" - SCH 40 THREADED, BLACK, ULC  
 1½" TO 4" - SCH 10 ROLL GROOVED, BLACK, ULC

**FITTINGS:** 1" TO 2" - CAST IRON FITTINGS, BLACK  
 1½" TO 4" - GROOVED FITTINGS AND COUPLINGS

**VALVES:** 1" TO 2" - BRONZE, 175 PSI  
 1½" TO 4" - GROOVED, 175 PSI

**FLOW SWITCH:** POTTER VSR VANE TYPE WATER FLOW ALARM SWITCH WITH RETARD

**FIRE DEPT CONNECTION:** WILSON & COUSINS MODEL IE28: FLUSH TYPE, 4" GRV x (2) @ 2½" HOSE THREADS. CHROME PLATED, ESCUTCHEON PLATE LABELED "SPRINKLER".

**DOUBLE CHECK VALVE ASSEMBLY:** WILKINS MODEL #350A

**CHECK VALVES:** GROOVED - TYCO MODEL #CV-1

**BUTTERFLY VALVES:** GROOVED - TYCO MODEL #BFV-N

**WELDING:** OUTLETS OFF MAINS AND LINES ARE WELDED IN ACCORDANCE WITH AWS B2.1

**SPRINKLERS:** SEE HEAD LEGEND ON DRAWINGS.

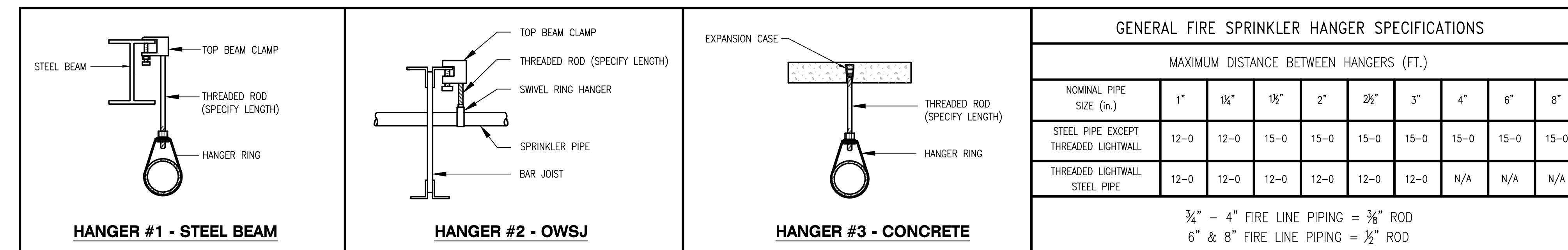
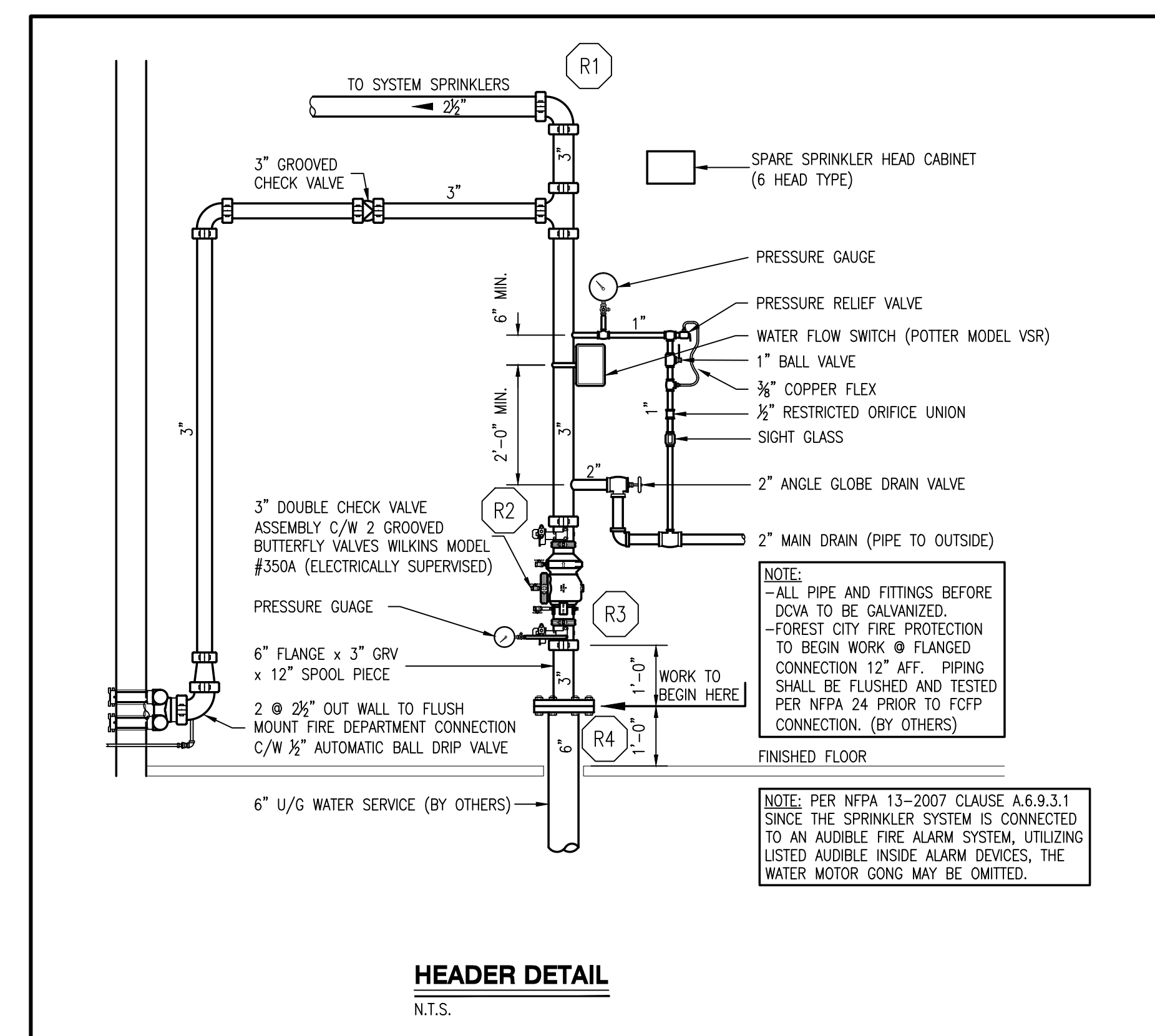
**INSTALLATION:**

ELEVATIONS ARE TO BE FIELD VERIFIED AND CONFIRMED. COORDINATION IS TO TAKE PLACE BETWEEN OTHER TRADES AND FOREST CITY FIRE PROTECTION.

**EXCLUSIONS OF CONTRACT:**

THE FOLLOWING ITEMS ARE **NOT INCLUDED** IN THIS CONTRACT AND WILL/MAY BE DONE BY OTHERS:

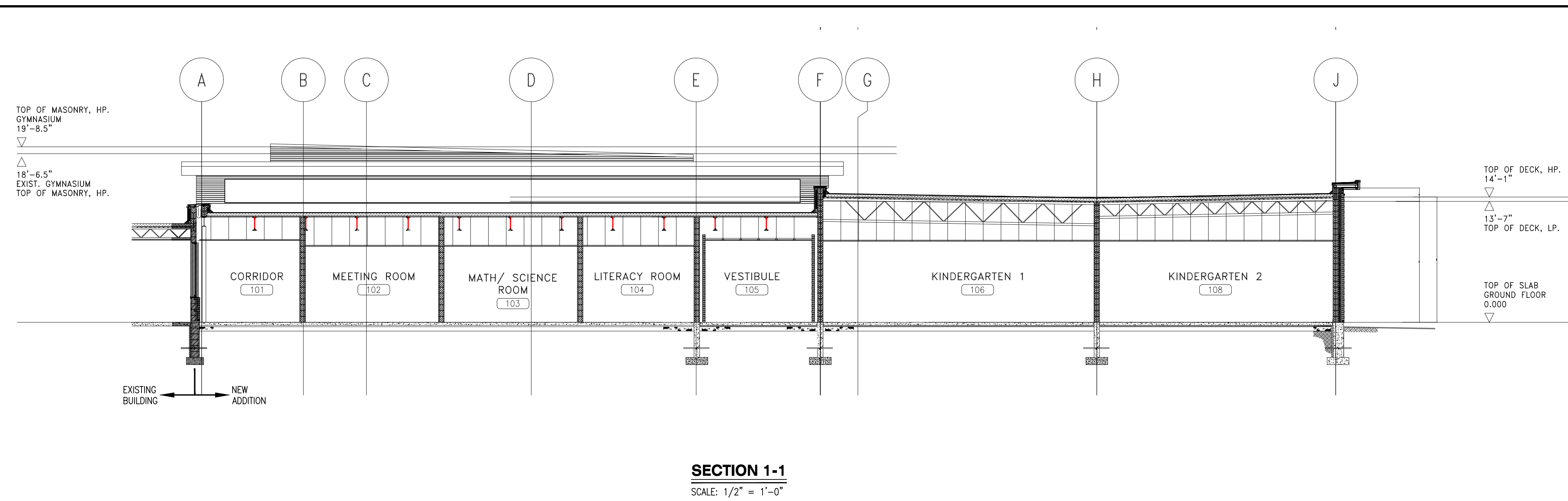
- PROVISION OF FIRE HYDRANT(S)
- STANDPIPE
- UNDERGROUND PIPING
- ELECTRICAL WIRING OF ANY KIND
- PAINTING OF PIPE



**HANGER DETAILS**  
SCALE: NONE

SPRINKLER SYMBOL DESCRIPTION						
SYMBOL	SIZE	K-FAC	MAKE	PART#	RESPONSE	NUMBER
STYLE	STYLE	°F	MODEL	FINISH	COMMENTS	

TOTAL HEADS REQUIRED ON THIS SHEET: \_\_\_\_\_



DATE	REV	DESCRIPTION
2013.08.27	2	REVISED AS BUILT
2013.07.08	1	REVISED PER SITE SURVEY
2013.04.30	0	ISSUED FOR APPROVAL

**REVISION HISTORY**

ENGINEER'S STAMP

**FOREST CITY FIRE PROTECTION** 55 FLEMING DRIVE, UNIT 1 CAMBRIDGE, ONTARIO N1T 2A9  
 PHONE: (519) 623-3500 FAX: (519) 623-5336  
 www.fcfp.ca

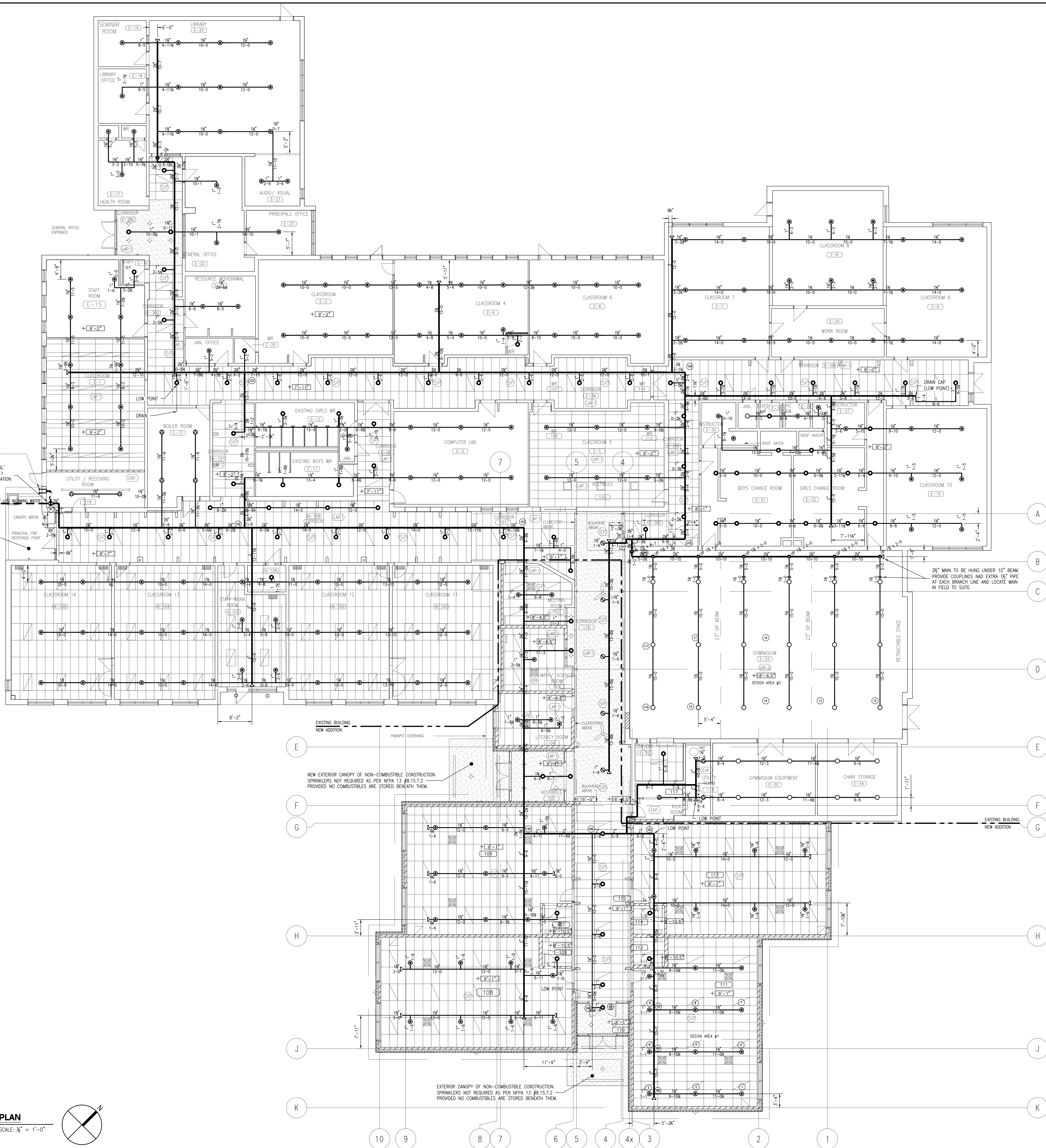
**PROJECT NAME:**  
**HILLCREST PUBLIC SCHOOL  
 31 RENWICK AVE.  
 CAMBRIDGE, ON**

**SHEET TITLE:**  
**FIRE SPRINKLER  
 DETAILS, SITE PLAN & NOTES**

**DRAWN BY:** C.M.  
**DATE:** 2013.04.30 **SCALE:** AS NOTED

**JOB NUMBER:** CL-13-319

**SHEET NUMBER:** FP 1 OF 2



SEE 'HEADER DETAIL' ON DRAWING #FP-1 FOR MORE INFORMATION IN THIS AREA

EX. EXTERIOR CANOPY OF NON-COMBUSTIBLE CONSTRUCTION. SPRINKLERS NOT REQUIRED AS PER NFPA 13 #8.15.7.2 PROVIDED NO COMBUSTIBLES ARE STORED BENEATH THEM.

NEW EXTERIOR CANOPY OF NON-COMBUSTIBLE CONSTRUCTION. SPRINKLERS NOT REQUIRED AS PER NFPA 13 #8.15.7.2 PROVIDED NO COMBUSTIBLES ARE STORED BENEATH THEM.

EXTERIOR CANOPY OF NON-COMBUSTIBLE CONSTRUCTION. SPRINKLERS NOT REQUIRED AS PER NFPA 13 #8.15.7.2 PROVIDED NO COMBUSTIBLES ARE STORED BENEATH THEM.

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

SPRINKLER SYMBOL DESCRIPTION						
SYMBOL	SIZE	K-FACTOR	MAKE	PART#	RESPONSE	NUMBER
●	1/2"	5.6	TYCO	TY3231	QUICK RESPONSE	155
○	1/2"	5.6	TYCO	TY3231	QUICK RESPONSE	5
○	1/2"	5.6	TYCO	TY3131	QUICK RESPONSE	27
○	1/2"	5.6	TYCO	TY3131	QUICK RESPONSE	9
○	1/2"	5.6	TYCO	TY3531	QUICK RESPONSE	83
○	CONC.	155	RF-1	BRASS	C/W WHITE PLATE	
TOTAL HEADS REQUIRED ON THIS SHEET:						289

DATE	REV	DESCRIPTION
2013.08.27	3	REVISED AS BUILT
2013.07.12	2	REVISED PER CONSULTANT'S COMMENTS
2013.07.08	1	REVISED PER SITE SURVEY
2013.04.30	0	ISSUED FOR APPROVAL

REVISION HISTORY	
DATE	REV DESCRIPTION

ENGINEER'S STAMP

FOREST CITY FIRE PROTECTION LTD. 55 FLEMING DRIVE, UNIT 1 CAMBRIDGE, ONTARIO N1T 2A9  
www.fcfp.ca PHONE: (519) 623-3500 FAX: (519) 623-5336

PROJECT NAME:  
**HILLCREST PUBLIC SCHOOL**  
31 RENWICK AVE.  
CAMBRIDGE, ON

SHEET TITLE:  
**FIRE SPRINKLER PLANS**

DRAWN BY:  
C.M.

DATE: 2013.04.30 SCALE: AS NOTED

JOB NUMBER:  
CL-13-319

SHEET NUMBER:  
FP 2 OF 2