

HYDRAULIC CALCULATION NODES

- BUTTERFLY VALVE WITH INTEGRAL TAMPER SWITCH AND POSITION INDICATOR
- O.S.Y. GATE VALVE
- O.S.Y. GATE VALVE WITH TAMPER SWITCH—LINE SIZE
- CONNECT NEW TO EXISTING
- ALARM VALVE
- DRY PIPE VALVE
- FIRE HYDRANT
- FIRE DEPARTMENT CONNECTION
- W.M.G.
- A.F.C.
- A.F.F.
- A.F.G.
- B.F.C.
- B.F.F.
- B.F.G.
- C.L.
- D.I.
- F.H.C.
- O.S.&Y.
- P.I.V.
- U.N.O.
- F.S.

WATER MOTOR GONG

ABOVE FINISHED CEILING

ABOVE FINISHED FLOOR

ABOVE FINISHED GRADE

BELOW FINISHED CEILING

BELOW FINISHED FLOOR

BELOW FINISHED GRADE

CENTER LINE

DUCTILE IRON

FIRE HOSE CABINET

OUTSIDE SCREW AND YOKE

POST INDICATOR VALVE WITH TAMPER SWITCH

UNLESS NOTED OTHERWISE

WATER FLOW ALARM SWITCH WITH RETARD MECHANISM

SPRINKLER SCHEDULE					
SYMBOL	THREAD	DESCRIPTION	TEMPERATURE	ORIFICE	K
○	0"	PENDENT	165°F	0"	5.6
○	0"	BRASS UPRIGHT	165°F	0"	5.6
▽	0"	SIDEWALL	165°F	0"	5.6

- SPRINKLER NOTES
- HOSE THREADS TO MATCH CITY OF WILMINGTON FIRE DEPARTMENT SPECIFICATIONS OR REQUIREMENTS.
  - POUR 1 CUBIC YARD MINIMUM CONCRETE THRUST BLOCKING SET IN UNDISTURBED EARTH AT EACH PIPE ELBOW BELOW GRADE, FOR PIPES 4" & LARGER.
  - WET TAP EXISTING WATER MAIN FOR NEW CONNECTIONS.
  - ALL DAY SYSTEM PIPING MUST BE GALVANIZED.
  - ALL INDOOR CONTROL VALVES 2" THROUGH 8" ARE TO BE THE BUTTERFLY TYPE.
  - REFER TO DRAWINGS FP-1 & FP-2 FOR DETAILS PERTAINING TO PIPE PENETRATIONS OF RATED ASSEMBLIES.

SPRINKLER SYSTEM DATA	
WET PIPE SYSTEM	
AREA A: 2nd FLOOR SPRINKLER	
ORDINARY HAZARD GROUP 3	
AREA CALCULATED.....	3097 S.F.
NO. SPRINKLERS.....	26
MINIMUM DENSITY.....	0.17 G.P.M./S.F.
PRESSURE REQUIRED AT NODE 0.....	21.05 P.S.I.
PRESSURE AVAILABLE AT NODE 0.....	58.28 P.S.I.
OUTSIDE FIRE HOSE FLOW.....	400 G.P.M. AT NODE 30
INSIDE FIRE HOSE FLOW.....	100 G.P.M. AT NODE 55
TOTAL SPRINKLER FLOW.....	561.54 G.P.M.
TOTAL WATER FLOW.....	1061.54 G.P.M.
DRY PIPE SYSTEM	
AREA B: ATTIC SPRINKLER	
ORDINARY HAZARD GROUP 3	
AREA CALCULATED.....	3087 S.F.
NO. SPRINKLERS.....	21
MINIMUM DENSITY.....	0.17 G.P.M./S.F.
PRESSURE REQUIRED AT NODE 0.....	33.07 P.S.I.
PRESSURE AVAILABLE AT NODE 0.....	37.75 P.S.I.
OUTSIDE FIRE HOSE FLOW.....	400 G.P.M. AT NODE 30
INSIDE FIRE HOSE FLOW.....	100 G.P.M. AT NODE 55
TOTAL SPRINKLER FLOW.....	577.81 G.P.M.
TOTAL WATER FLOW.....	1077.81 G.P.M.
FIRE PUMP	
RATED CAPACITY.....	500 G.P.M.
RATED PRESSURE.....	70 P.S.I.
WATER FLOW TEST	
STATIC PRESSURE.....	55 P.S.I.G.
RESIDUAL PRESSURE.....	40 P.S.I.G.
FLOW.....	349 G.P.M.
LOCATION.....	HYDRANTS C2 & C3
ELEVATION.....	41.5 FT.
TEST DATE.....	12 MAY 1994

LEGEND

- ALARM CHECK VALVE
- RETARDING CHAMBER
- WATER MOTOR ALARM BELL
- RESTRICTED VENT
- AUTOMATIC DRIP
- DRIP CUP
- ALARM TEST VALVE (NORMALLY CLOSED)
- ALARM SHUT-OFF VALVE & CHECK VALVE (NORMALLY OPENED)
- WATER PRESSURE GAUGE
- MAIN DRAIN VALVE - 8" MINIMUM FOR RISERS UP TO 2" 10" MINIMUM FOR 20" & 3" RISERS 2" FOR RISERS 4" & LARGER
- PIPE TO FLOOR DRAIN
- ALARM RELAY
- ALARM VALVE STRAINER
- FLOW SWITCH

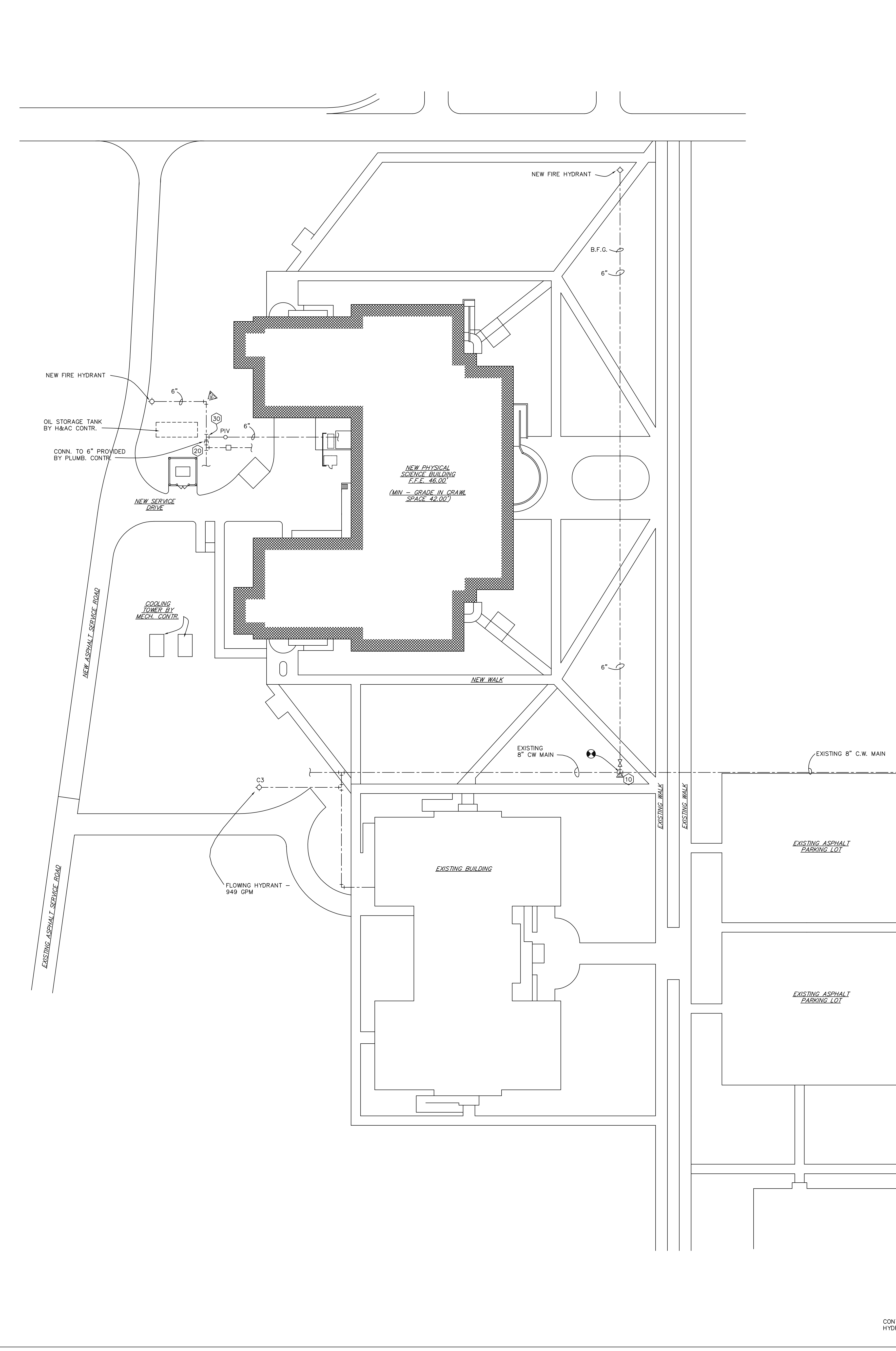
SP1 02 SPRINKLER ALARM VALVE DETAIL NO SCALE

KEY PLAN

SP1 01 SPRINKLER SITE PLAN SCALE: 1" = 40'-0"

SP1 03 FIRE HYDRANT DETAIL NO SCALE

SP1 04 CORRIDOR PIPING SECTION SCALE: 1/2" = 1'-0"



DRAWING REVISIONS:

NO.	DATE	REMARKS

DATE: 16 MAY 1994 PROJECT#: 9305

DESIGNED BY: DLH DRAWN BY: RDH II CHECKED BY: WMP CHECKED BY: REM

SEAL 3494

DATE: 16 MAY 1994 PROJECT#: 9305