

PLOT PLAN
NOT TO SCALE

LEGEND

- 1 6" O.S.W. GATE VALVE W/ TAMPER SWITCH (N.O.)
- 2 SUCTION GAUGE (0-300 PSI)
- 3 PATTERSON FIRE PUMP MODEL 666 VP NINE 50HP 460/3/60 RATED FOR 750 GPM @ 80 PSI
- 4 DISCHARGE GAUGE (0-300 PSI)
- 5 CANSIM RELIEF VALVE LOCATED ON THE DISCHARGE SIDE OF THE PUMP.
- 6 6" WATER CHECK VALVE
- 7 6" GROOVED BUTTERFLY VALVE W/ TAMPER SWITCH (N.O.)
- 8 6" GROOVED CHECK VALVE
- 9 6" GROOVED BUTTERFLY VALVE W/ TAMPER SWITCH (N.O.)
- 10 3" GROOVED CHECK VALVE
- 11 3" POTTER VSR-4 FLOW SWITCH
- 12 1/2" TEST AND DRAIN VALVE W/ 1/2" RELIEF VALVE
- 13 1/4" 3-WAY VALVE
- 14 WATER PRESSURE GAUGE (0-300 PSI)
- 15 2" TEST AND DRAIN VALVE W/ 1/2" RELIEF VALVE
- 16 6" GROOVED BUTTERFLY VALVE W/ TAMPER SWITCH (N.O.)
- 17 6" POTTER VSR-6 FLOW SWITCH
- 18 6" ARIES 1200 BACKFLOW PREVENTER W/BUTTERFLY VALVE TAMPER SWITCH (N.O.) (SEE BASEMENT PLAN DWG 2 OF 3)
- 19 2" MIN MODEL 141E 1 HP 460/3/60 JOCKEY PUMP 1" SUCTION 1" DISCHARGE
- 20 CUTLER HAMMER MODEL XAP JOCKEY PUMP CONTROLLER 460/3/60
- 21 CUTLER HAMMER MODEL E770 FIRE PUMP CONTROLLER 460/3/60
- 22 JOCKEY PUMP RELIEF VALVE
- 23 1" CHECK VALVE
- 24 1" GATE VALVE W/ TAMPER SWITCH (N.O.)
- 25 1/2" GLOBE VALVE
- 26 1/4" PLUG
- 27 1/2" CHECK VALVE W/ 3/32" HOLE IN CAPPER
- 28 1" AUXILIARY DRAIN VALVE
- 29 PIPE STAND
- 30 HEAD BOX 12 SPRAY HEADS AND HEAD WRENCH.
- 31 NOT USED
- 32 EXISTING 2" MAIN DRAIN DISCHARGE (SEE BASEMENT PLAN DWG 2 OF 3)
- 33 FIRE PUMP TEST HEADER (3) 2 1/2" HOSE GATE VALVES (SEE BASEMENT PLAN DWG 2 OF 3)
- 34 EXISTING 4x2x2x2 FIRE BEFT CONNECTION (SEE BASEMENT PLAN DWG 2 OF 3)
- 35 4" GROOVED CHECK VALVE (SEE BASEMENT PLAN DWG 2 OF 3)
- 36 1/2" BALL OPER VALVE (SEE BASEMENT PLAN DWG 2 OF 3)

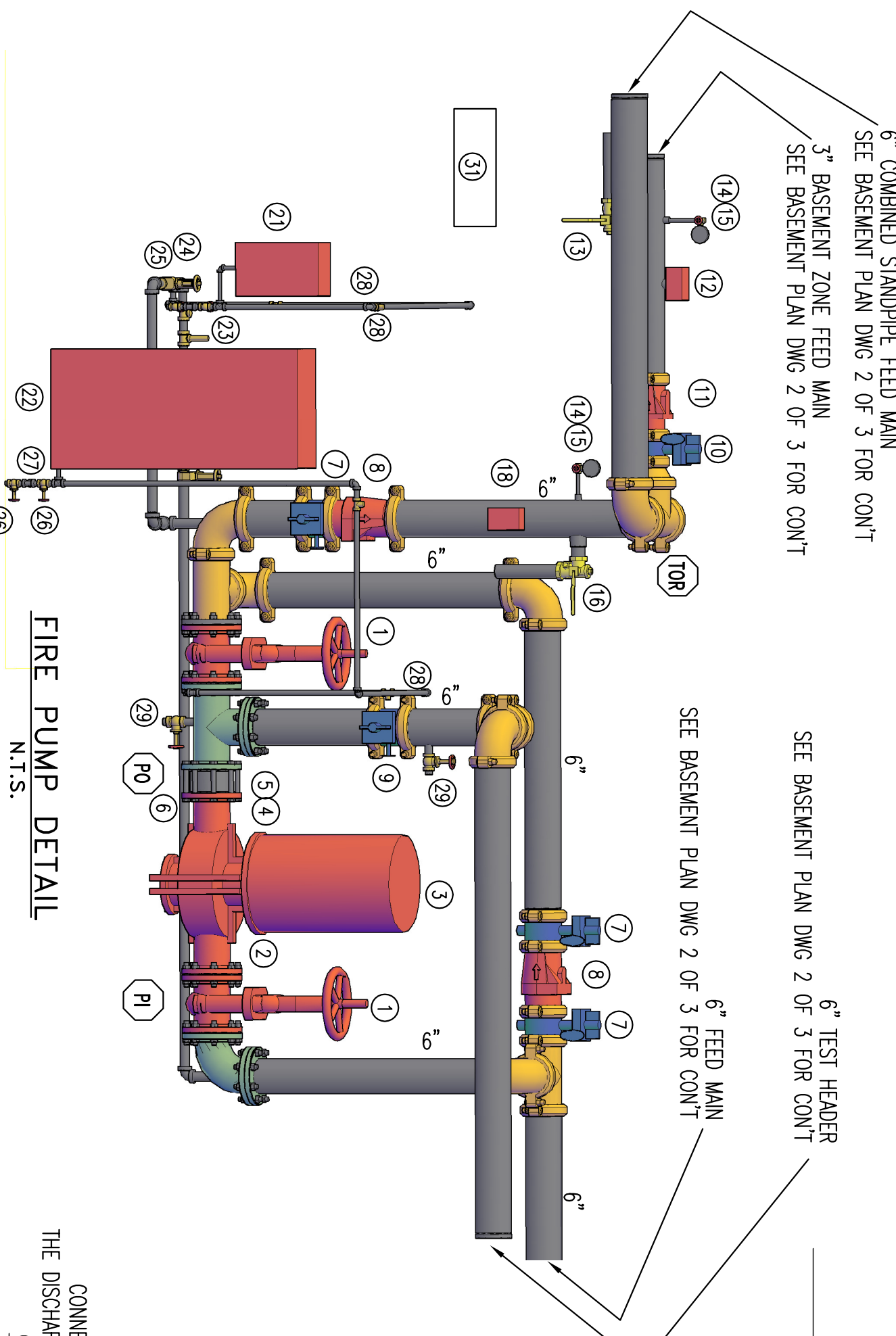
N.O. = NORMALLY OPEN
N.C. = NORMALLY CLOSED

NOTE: WHERE THE PUMP ROOM IS NOT CONSTANTLY ATTENDED, AUDIBLE OR VISIBLE SIGNAL, POWERED BY A SOURCE NOT EXCEEDING 120V SHALL BE PROVIDED AT A POINT OF CONSTANT ATTENDANCE.

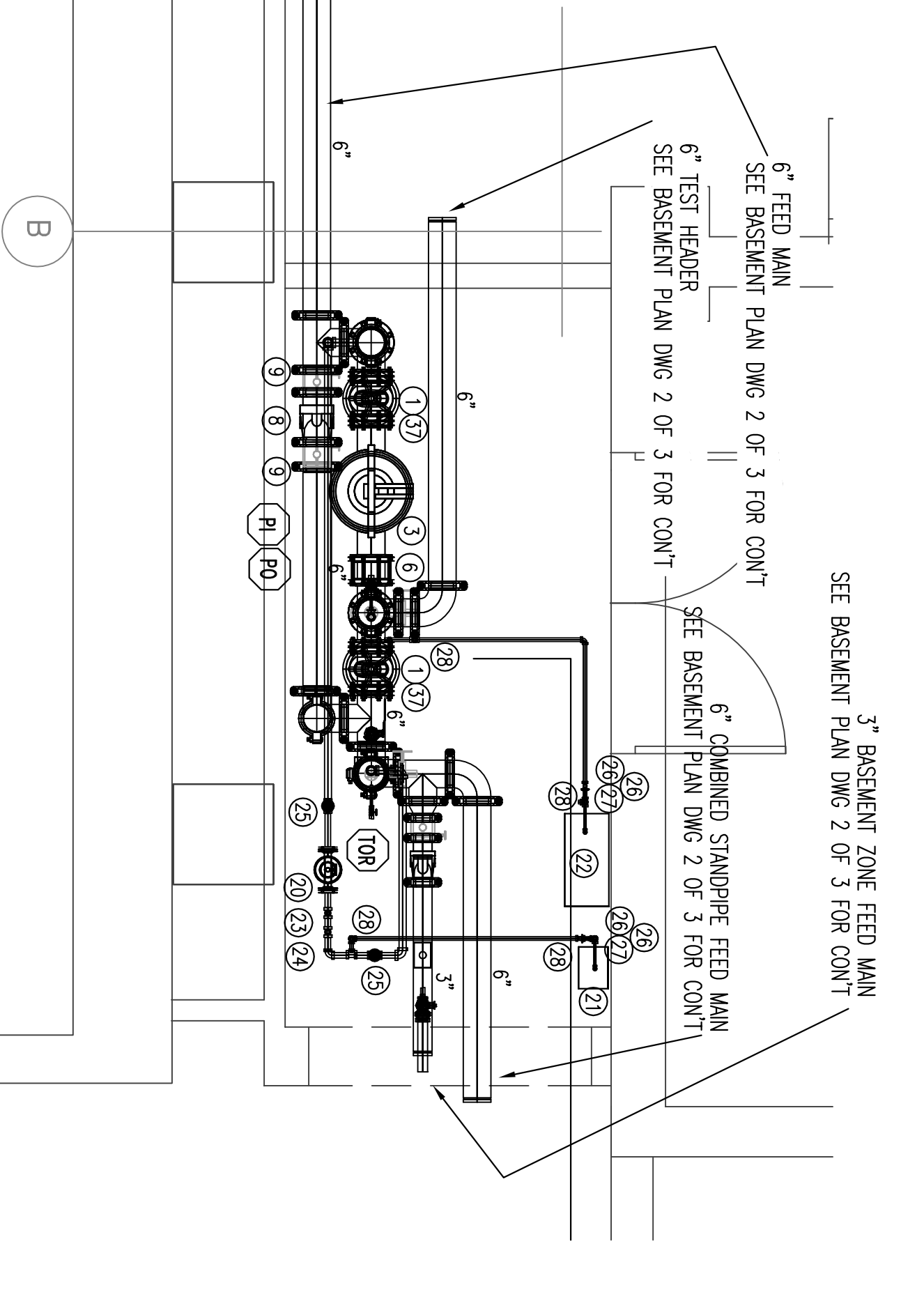
THE FIRE PUMP SHALL BE MONITORED FOR THE FOLLOWING FUNCTIONS:
1) MOTOR RUNNING
2) LOSS OF PHASE
3) PHASE REVERSAL
4) CONTROLLER CONNECTED TO ALTERNATE POWER

SEQUENCE OF PUMP OPERATION
FIRE PUMP START = 88 PSI - 80 PSI
JOCKEY PUMP START = 170 PSI - 170 PSI + 5 PSI = 175 PSI
FIRE PUMP STOP = 160 PSI - 5 PSI = 155 PSI
FIRE PUMP START = 160 PSI - 5 PSI = 155 PSI
FIRE PUMP STOP = 170 PSI - 10 PSI = 160 PSI
THE ABOVE SETTINGS ARE APPROXIMATE AND MAY VARY SIGNIFICANTLY TO SUIT ACTUAL FIELD TESTS
CONDITIONS, WORKING BY OTHERS IN COMPLIANCE WITH ART. 605 OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA 70).

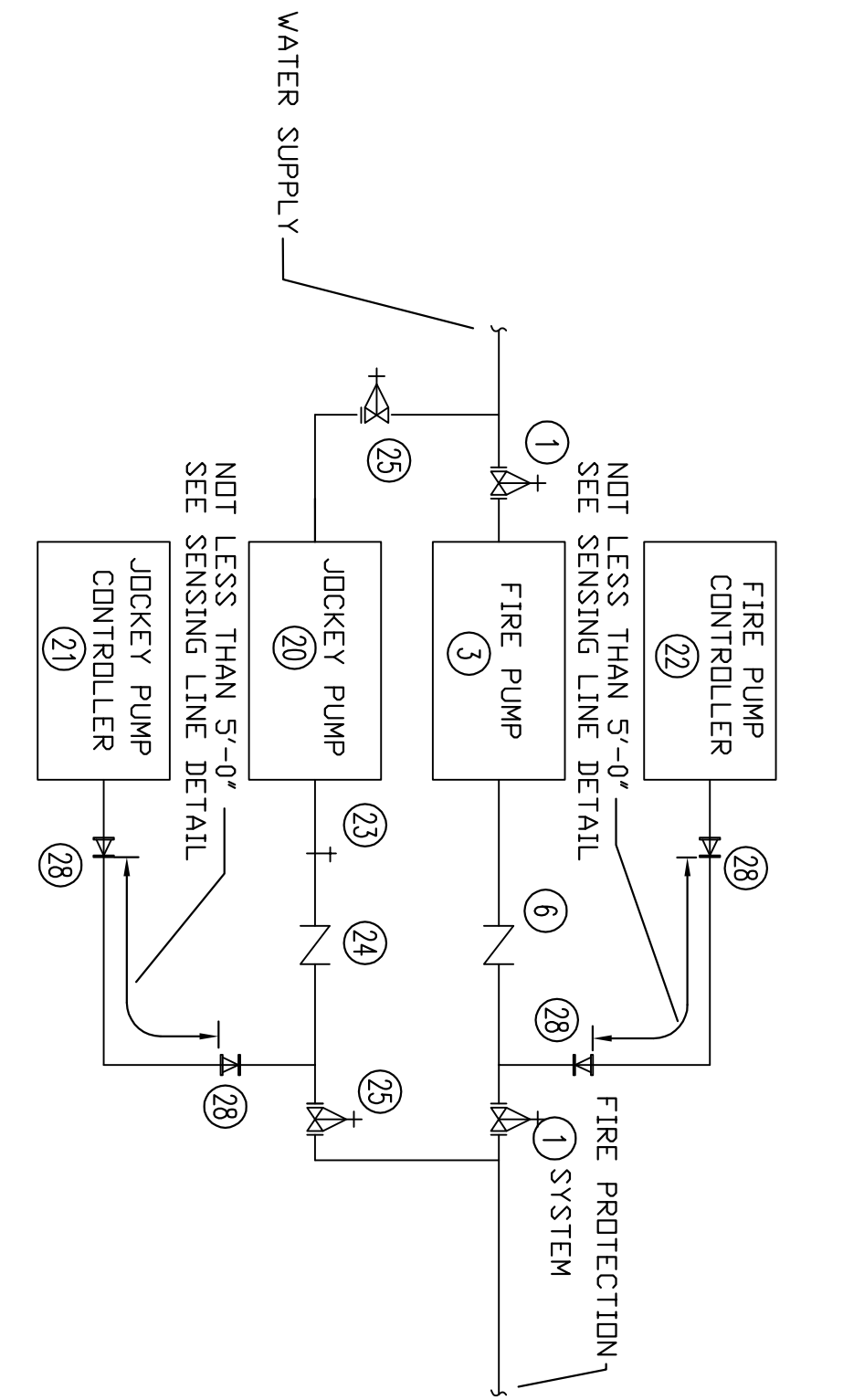
NOTE: THE UNDERGROUND PIPING IS EXISTING, PROXIMITY INDICATED BY OTHERS, SYSTEM FIRE PROTECTION INC. TO START AT THE UNDERGROUND DISCHARGE PUMP PROVIDED BY OTHERS.



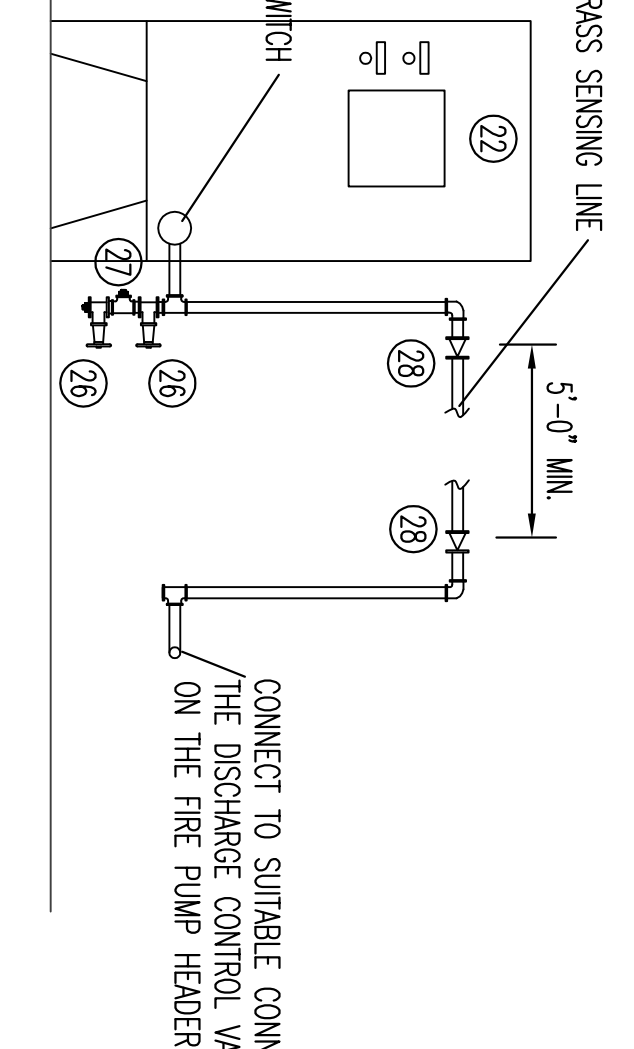
FIRE PUMP DETAIL
N.T.S.



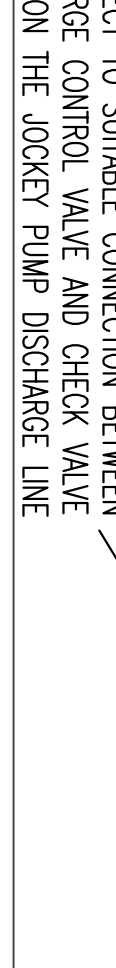
BASEMENT FIRE PUMP ROOM PARTIAL PLAN
SCALE N.T.S.
IF ELEV. = 90.00'



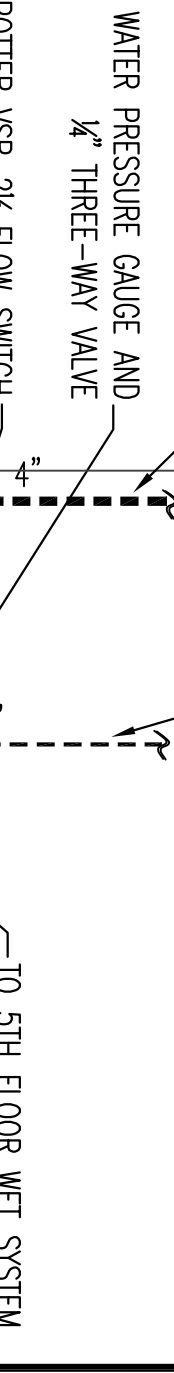
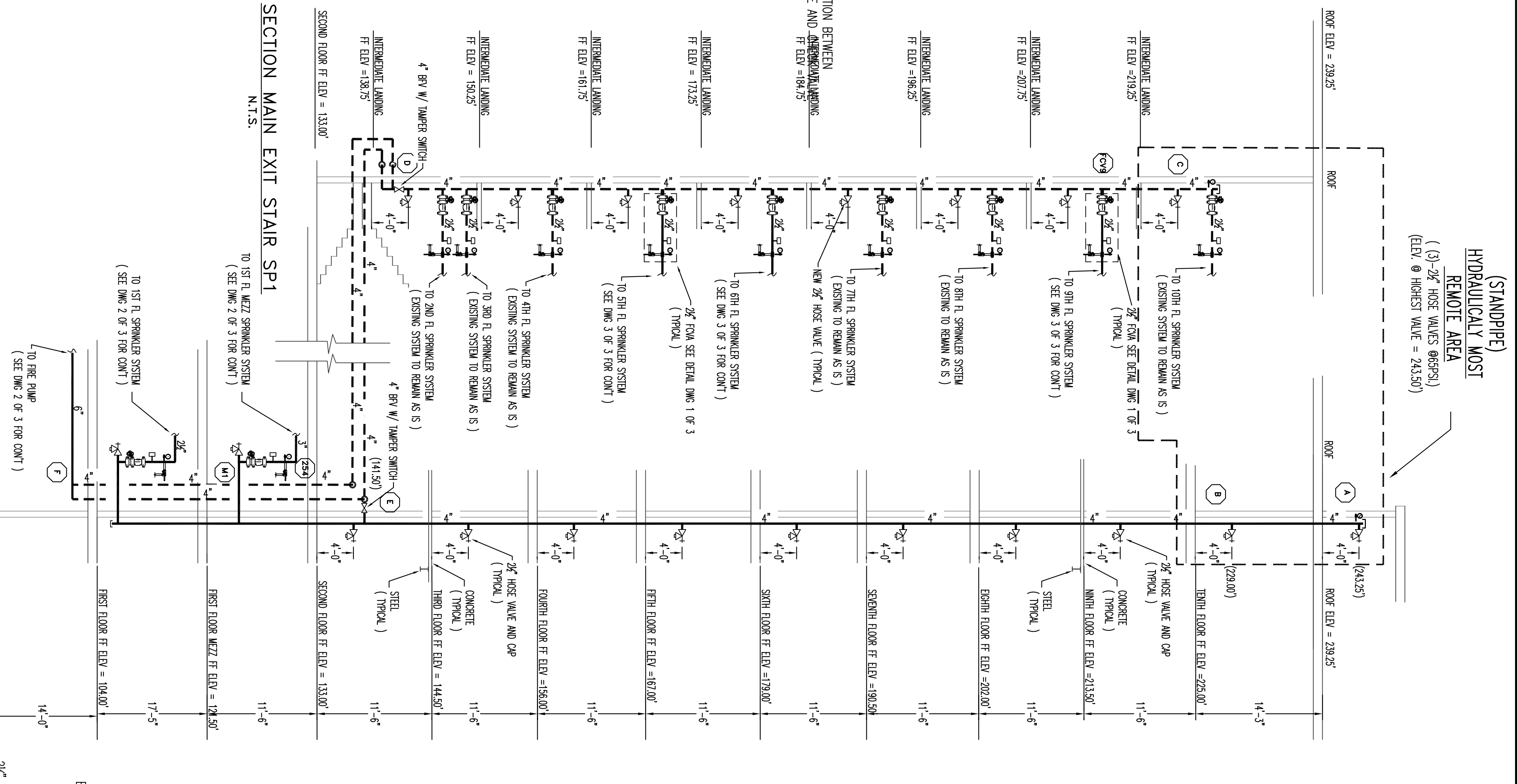
PIPING CONNECTION FOR PRESSURE SENSING LINE
(AS PER FIGURE A.4.30(b) NFPA 20, 2010 EDITION)



FIRE PUMP SENSING LINE DETAIL
NOT TO SCALE



JOCKEY PUMP SENSING LINE DETAIL
NOT TO SCALE



SECTION SECONDARY EXIT STAIR SP2
N.T.S.

N.O. = NORMALLY OPEN

"FCVA" DETAIL (TRYPOL 5TH, 6TH, AND 9TH FLOOR)
N.T.S. (MAIN EXIT STAIR)

GENERAL NOTES

- 1 SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA 13, 14, AND 20 (2010).
- 2 SET EXISTING EXTERIOR FIRE PROTECTION SPRINKLER MAIN BANK & FIRST SECOND FLOOR & BASEMENT FE-205-95 SHEET 1 OF 1 FOR RISER, SITE PLAN & WATER MARK.
- 3 SCOPE OF WORK:
 1. INSTALL 750 GPM 460 PSI FIRE PUMP TO SUPPLY THE CLASS 1 WET AUTOMATIC STANDPIPE AND SPRINKLER SYSTEMS LOCATED BASEMENT TO NINTH FLOOR.
 2. INSTALL CLASS 1 WET AUTOMATIC STANDPIPE IN THE SECONDARY EXIT STAIR WITH 2 1/2" HOSE WRENCH LOCATED ON THE SECOND FLOOR TO THE NINTH FLOOR.
 3. CONVERT EXISTING 4" SPRINKLER RISER LOCATED IN THE MAIN STAIR TO A COMPOUND STANDPIPE RISER WITH 2 1/2" HOSE VALVES LOCATED FROM THE SECOND TO THE NINTH FLOOR.
 4. INSTALL SPRINKLER PROTECTION ON THE BASEMENT, FIRST FLOOR MEZANINE, FIFTH, SIXTH, AND NINTH FLOORS ONLY. ALL OTHER FLOORS OF THE BUILDING HAVE SPRINKLER PROTECTION PREVIOUSLY INSTALLED.
- 4 OCCUPANCY HAZARD AND CLASSIFICATION:
 - LIGHT HAZARD = ELEVATOR, OFFICES, BATH ROOMS, CORRIDORS, AND CONFERENCE ROOMS.
 - GROUP 1 = MECH/ ELEC ROOM, STORAGE ROOM, THE STORAGE.
- 5 MAXIMUM HEIGHT OF STORAGE 8'-0" AFF.
- 6 ALL DIMENSIONS ARE SHOWN FOR GENERAL LOCATION OF SPRINKLER HEADS ; FINISH WAY WAY TO SUIT ACTUAL FIELD CONDITIONS.
- 7 ALL HEADS NOT SPECIFICATED SOME SPRINKLER HEADS HAVE BEEN SHOWN @ CENTERLINE OF WALLS AND OTHERS @ FIELD CONDITIONS WITH REFERENCE TO BUILDING CONDITIONS WILL VARY ACCORDING TO FIELD CONDITIONS.
- 8 ACoustical CEILING TILE (ACT) TO BE LISTED NON-COMBUSTIBLE WITH UL FLAME SPREAD OF LESS THAN 25.
- 9 ALL WORKING TO BE DONE BY OTHERS.
- 10 CONSTRUCTION OF 2 HOUR RATED FIRE PUMP ROOM TO BE DONE BY OTHERS.

HYDRAULIC SYSTEM

THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED WET AUTOMATIC SPRINKLER SYSTEM AS PER NFPA 13 (2010)

LOCATION: ROOF

ITEM	QUANTITY	UNIT	REMARKS
1. MANULATED 3" RISERS	2	500 GPM	
2. RIM AT RISER RISER	250	GPM	
3. RIM FOR ADDITIONAL RISER	250	GPM	
SYSTEM DEMAND: 750 GPM AT 113 PSI			
1. WATER FROM RISER AT FIRE BEFT CONNECTION	113	PSI	

HYDRAULIC DATA NAMEPLATE

GENERAL NOTES	REVISIONS	DATE
SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA 13, 14, AND 20 (2010). EXPOSED BRONCH LINE PIPING 1"-2" TO BE BLACK STEEL SCH-40 JOINED BY THREADED DUCTILE IRON FITTINGS.		
CONCEALED BRONCH LINE PIPING 1"-2" TO BE CPVC PLASTIC PIPE C-150 JOINED WITH GULDED CPVC FITTINGS.		
MAIN PIPING 2" AND LARGER TO BE BLACK STEEL SCH-10 10 W/ GROOVED ENDS & WELDED OUTLETS JOINED BY MECHANICAL COUPLINGS.		
OWNER TO PROVIDE SUFFICIENT HEAD THROUGHOUT BUILDING TO PREVENT FREEZING OF WATER FILLED SPRINKLER PIPING AND EQUIPMENT. (ART)		

REQUIRED APPROVALS	OWNER / ARCHITECT	DATE
OWNER / ARCHITECT	STATE FIRE MARSHAL	
CONTRACTOR	PORTLAND FIRE DEPARTMENT	

5 MONUMENT SQUARE	2014 FIRE PROTECTION UPGRADE	465 CONGRESS ST., PORTLAND, ME
CONTRACT WITH: OWNER	DRAWING NO. GFD	
	MEET LEVEL III	
	CERT # 090388	
	CHECKED BY: WAE	
	MEET LEVEL III	
	CERT # 095574	
	CONTRACTOR LICENSE #	101
	CONTRACTOR REG #	388

FIRE SPRINKLER	DATE
PLANS AND DETAILS	4-7-14
DWG. NO.	AS NOTED
1 OF 3	
JOB NUMBER	
AU-5176-14	
SCALE	
AS NOTED	