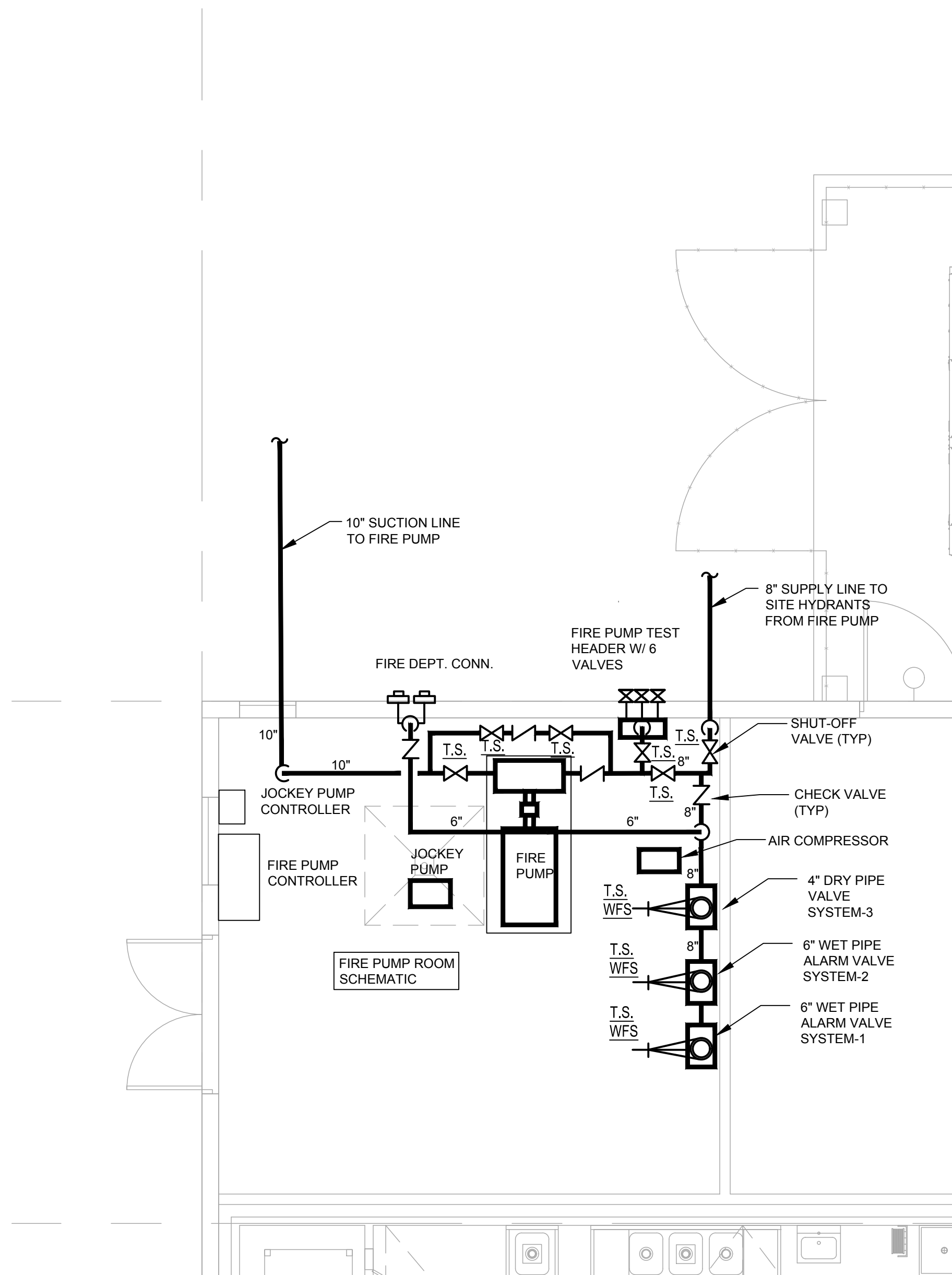
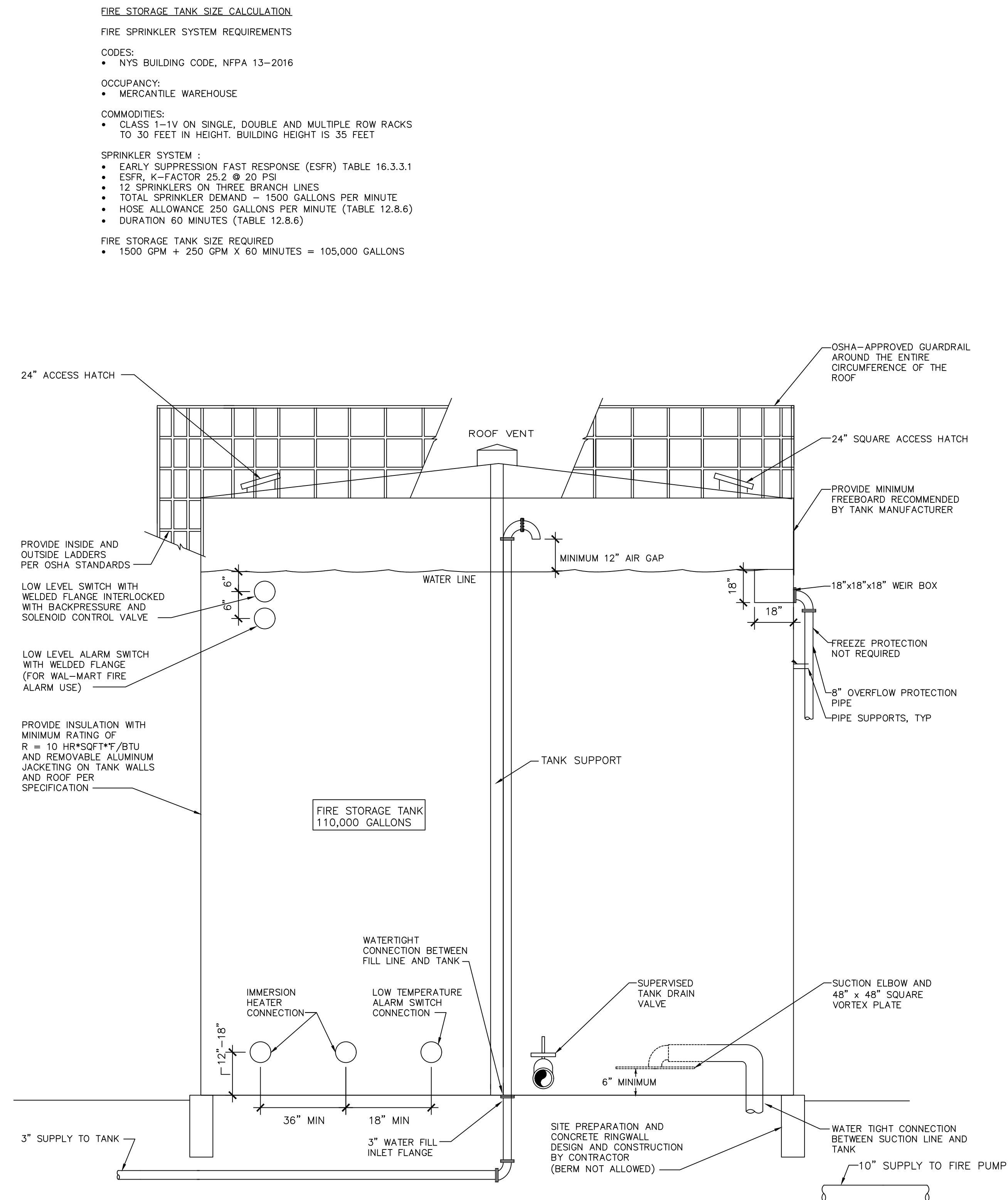
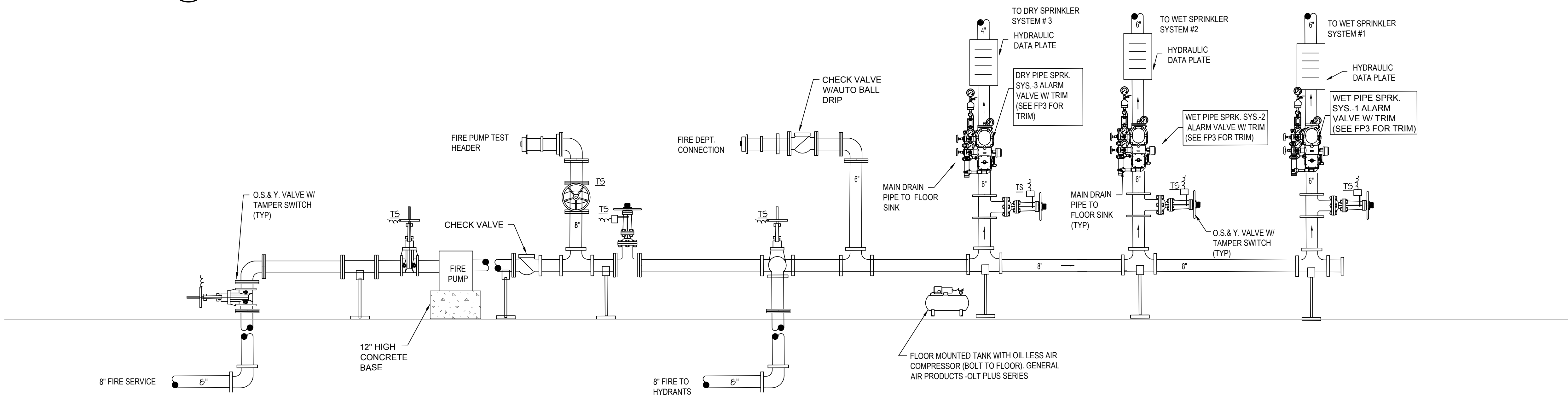




1 SUCTION TANK / FIRE PUMP ROOM PLAN  
1/4"=1'-0"



2 SUCTION TANK ELEVATION  
NTS



3 FIRE PUMP PIPING SCHEMATIC  
NTS

#### FIRE STORAGE TANK SIZE CALCULATION

#### FIRE SPRINKLER SYSTEM REQUIREMENTS

CODES:

- NYS BUILDING CODE, NFPA 13-2016

#### OCCUPANCY:

- MERCANTILE WAREHOUSE

#### COMMODITIES:

- CLASS 1-1V ON SINGLE, DOUBLE AND MULTIPLE ROW RACKS TO 30 FEET IN HEIGHT. BUILDING HEIGHT IS 35 FEET

#### SPRINKLER SYSTEM :

- EARLY SUPPRESSION FAST RESPONSE (ESFR) TABLE 16.3.3.1
- ESFR, K-FACTOR 25.2 @ 20 PSI
- 12 SPRINKLERS ON THREE BRANCH LINES
- TOTAL SPRINKLER DEMAND = 1500 GALLONS PER MINUTE
- HOSE ALLOWANCE 250 GALLONS PER MINUTE (TABLE 12.8.6)
- DURATION 60 MINUTES (TABLE 12.8.6)

#### FIRE STORAGE TANK SIZE REQUIRED

- 1500 GPM X 250 GPM X 60 MINUTES = 105,000 GALLONS



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#### REVISIONS

| #  | DATE | TYPE |
|----|------|------|
| 1  |      |      |
| 2  |      |      |
| 3  |      |      |
| 4  |      |      |
| 5  |      |      |
| 6  |      |      |
| 7  |      |      |
| 8  |      |      |
| 9  |      |      |
| 10 |      |      |

#### FIRE PROTECTION PUMP AND TANK DETAILS

DATE: 9/10/2020

JOB NO. 19230

**FP-2.1**

SHEET NO.