

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



**SYMBOL LEGEND**

- 1HFB — 1-HOUR FIRE BARRIER WALL
- 2HFB — 2-HOUR FIRE BARRIER WALL
- SP — SMOKE PARTITION
- >EGRESS—> TRAVEL DISTANCE PATH
- TD TRAVEL DISTANCE (TD)
- CPT COMMON PATH OF TRAVEL DISTANCE (CPT)
- BEGIN TRAVEL PATH
- └ END CPT AND CONTINUE TD
- ▶ END TD
- OCCUPANCY GROUP 

XX	XX
XX	XX
XX	XX

 FACTOR (SF/PERSON)
- CALCULATED CAPACITY 

XX	XX
XX	XX
XX	XX

 AREA (SF)
- WIDTH (IN) 

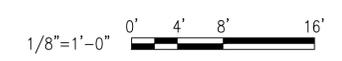
XXX	XXX
XXX	XXX
XXX	XXX

 EGRESS COMPONENT
- CAPACITY USED 

XXX	XXX
XXX	XXX
XXX	XXX

 USER REQUIRED CAPACITY
- MAXIMUM CAPACITY

**GRAPHIC SCALE**



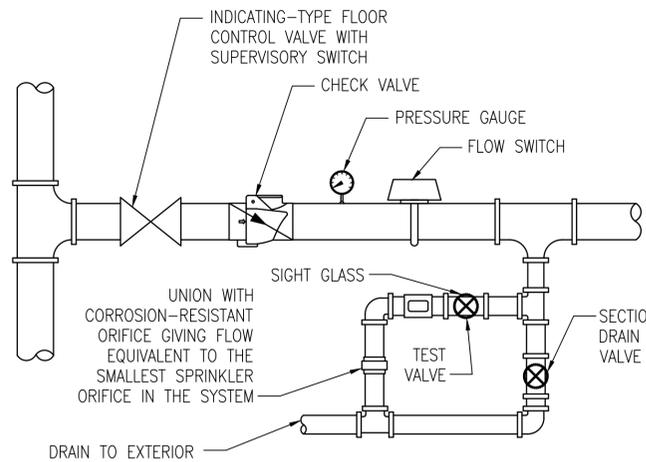
	<p>APPROVED</p> <p>FIR COMMANDER NAVFAC</p> <p>ACTIVITY</p> <p>SATISFACTORY TO DATE</p> <p>DES: SLW   DRW: SLW   CHK: LRP</p> <p>BRANCH MANAGER</p> <p>FM/DM: M. PERRY/L. SANDERS</p> <p>CHIEF ENG/ARCH</p> <p>FIRE PROTECTION</p>
<p>NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC</p> <p>NAVAL STATION - NORFOLK, VIRGINIA</p> <p>NAVAL STATION NORFOLK</p> <p><b>FY 2016 P-518</b></p> <p><b>MH-60 AVET TRAINING FACILITY</b></p> <p>BUILDING ADDITION FLOOR PLAN</p>	
<p>SCALE: AS NOTED</p> <p>PROJECT NO.: 1291639</p> <p>CONSTR. CONTR. NO.</p> <p>NAVFAC DRAWING NO. 12701661</p> <p>SHEET 65 OF 109</p> <p><b>LS101</b></p> <p style="font-size: small;">DRAWFORM REVISION: 10 MARCH 2009</p>	

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**FIRE PROTECTION LEGEND**

- UPRIGHT SPRINKLER
- PENDENT SPRINKLER
- △ SIDEWALL SPRINKLER
- ⊗ UPRIGHT SPRINKLER WITH GUARD
- ⊗ PENDENT SPRINKLER WITH GUARD
- ⊥ CAP
- ⊥ REDUCER
- ⊥ TEE TURNED AWAY FROM VIEWER
- ⊥ NEW SPRINKLER PIPING
- ⊥ 90° ELBOW TURNED AWAY FROM VIEWER
- ⊥ PIPE UP
- ⊥ PIPE CONTINUATION MARK
- ⊥ FIRE DEPARTMENT CONNECTION, WALL MOUNTED
- ⊥ BACKFLOW PREVENTER, REDUCED PRESSURE TYPE
- ⊥ CHECK VALVE
- ⊥ ELBOW DOWN
- ⊥ BUTTERFLY VALVE
- ⊥ PIPE TEE DOWN
- ⊗ SPRINKLER RISER
- ⊥ BACKFLOW PREVENTER TEST HEADER
- [FACP] FIRE ALARM CONTROL PANEL
- [NAC] FIRE ALARM NAC POWER SUPPLY PANEL
- [LED] TEXT SIGN
- ⊗ WATER FLOW SWITCH
- ⊗ TAMPER SWITCH
- [ ] MANUAL PULL STATION
- ⊗ XX CEILING MTD SPEAKER/STROBE (XX INDICATES CANDELA)
- ⊗ CEILING MTD SPEAKER
- ⊗ XX SPEAKER/STROBE (XX INDICATES CANDELA)
- ⊗ WP WALL MOUNTED WEATHERPROOF SPEAKER
- ⊗ WALL MOUNTED SPEAKER
- ⊗ SMOKE DETECTOR
- ⊗ BT BEAM SMOKE DETECTOR TRANSMITTER
- ⊗ BR BEAM SMOKE DETECTOR RECEIVER
- ⊗ CO CARBON MONOXIDE DETECTOR



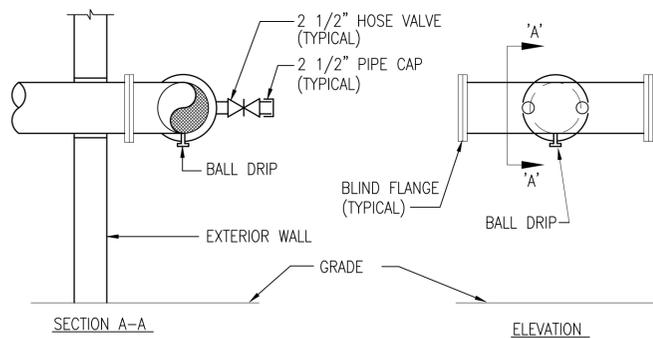
**FIRE SPRINKLER ZONE VALVE ASSEMBLY DETAIL**  
SCALE: NONE

**FIRE ALARM GENERAL NOTES**

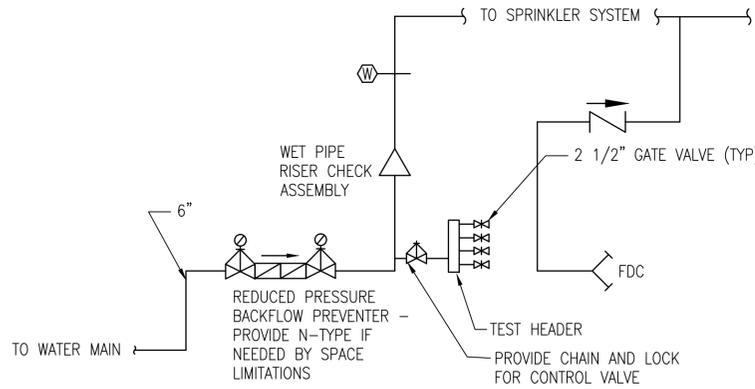
- BUILDING SP-250 HAS AN EXISTING GAMEWELL MODEL IF610 FIRE ALARM SYSTEM WITH AN EVAX VOICE SYSTEM. CONTRACTOR SHALL EXTEND THE EXISTING FIRE ALARM/MASS NOTIFICATION SYSTEM SERVE THE NEW ADDITION. PROVIDE ALL WIRING, CONDUIT AND ALL OTHER ASSOCIATED EQUIPMENT FOR A FULLY OPERABLE SYSTEM. ALL WORK AND INSTALLATION SHALL CONFORM WITH NFPA 70 (2011) AND NFPA 72 (2013).
- INSTALL ALL NEW WALL MOUNTED STROBES 6-INCHES BELOW CEILINGS OR 80-INCHES AFF, WHICHEVER IS LOWER, TO CENTERLINE OF LIGHT APPARATUS.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SYSTEM CATALOG PRODUCT DATA SHEETS AS REQUIRED. SHOP DRAWINGS SHALL INCLUDE ALL COMPONENTS AND DETAILS REQUIRED BY THE APPLICABLE CODES AND STANDARDS.
- ALL EQUIPMENT AND MATERIALS MUST BE NEW.
- ALL WORK SHALL BE INSPECTED BY NAVFAC MIDLANT FIRE PROTECTION ENGINEER FOR COMPLIANCE WITH THE REQUIREMENTS OF ALL CODES AND STANDARDS ON THIS SHEET.

**SPRINKLER GENERAL NOTES**

- BUILDING SP-250 HAS AN EXISTING WET PIPE FIRE SPRINKLER SYSTEM WITH THE WATER MAIN ENTERING ON THE EAST SIDE OF BUILDING SP-250. CONTRACTOR SHALL PROVIDE A SEPARATE AUTOMATIC WET-PIPE SPRINKLER SYSTEM TO PROTECT THROUGHOUT THE NEW ADDITION INCLUDING PIPING, HANGERS, SPRINKLERS, PIPING CONCEALMENT, AND ALL ASSOCIATED EQUIPMENT. ALL WORK AND INSTALLATION SHALL CONFORM WITH THE APPLICABLE PROVISIONS OF NFPA 13 (2013). CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND AVOID ALL OBSTRUCTIONS, SUCH AS LIGHTS, DUCT WORK, CONDUIT, PIPES, BEAMS, STRUCTURAL MEMBERS, ETC.
- ALL SPRINKLER PIPE SHALL BE PRIMED AND PAINTED.
- ALL AREAS ARE CONSIDERED FACTORY MUTUAL HAZARD CATEGORY 1 EXCEPT AS NOTED.
- CONTRACTOR IS RESPONSIBLE FOR FIELD COORDINATION AMONG TRADES AND TO LOCATE SPRINKLERS, PIPE HANGERS AND INSTALLATION PER NFPA 13.
- CONTRACTOR SHALL PERFORM A NEW FIRE HYDRANT FLOW TEST PRIOR TO PERFORMING THE FIRE SPRINKLER SYSTEM HYDRAULIC CALCULATIONS. CONTRACTOR SHALL COORDINATE NEW FLOW TEST WITH BASE PUBLIC WORKS UTILITIES DEPARTMENT.
- ALL CONTROL VALVES SHALL BE BUTTERFLY TYPE WITH INTEGRAL TAMPER SWITCHES.



**TEST HEADER DETAIL**  
NO SCALE



**SPRINKLER SYSTEM DIAGRAM**  
NO SCALE

**SPRINKLER SYSTEM DESIGN DATA**

SYSTEM TYPE	OCCUPANCY TYPE	DESIGN DENSITY GPM/SF	DESIGN AREA SF	HOSE STREAM GPM	APPROX. TOTAL FLOW RATE GPM	MAXIMUM SPRINKLER PROTECTION AREA (SF)	NOTES
WET	FM HAZARD CATEGORY 1	0.10	1500	250	400	225	BRIEFING RMS, OFFICES, AND TOILETS
WET	FM HAZARD CATEGORY 1	0.20	2500	250	750	225	HIGH BAY WITH CEILING GREATER THAN 30' HIGH. SEE NOTE 1.
WET	FM HAZARD CATEGORY 2	0.20	2500	250	750	130	ALL OTHER SPACES

NOTES: PROVIDE SPRINKLERS FOR HIGH BAY AREA WITH A K FACTOR OF 8.0 MINIMUM.

**FIRE HYDRANT FLOW TEST DATA**

STATIC PRESSURE PSI	RESIDUAL PRESSURE PSI	FLOW RATE GPM	DATE TESTED
62	20	11424	-

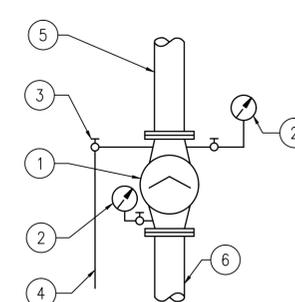
NOTES: FLOW TEST PERFORMED DURING P-705 AND P-707 PROJECTS.

**LEGEND**

- ① RISER CHECK VALVE
- ② WATER PRESSURE GAUGE WITH GAUGE COCK
- ③ 2" MAIN DRAIN VALVE
- ④ DISCHARGE TO OUTSIDE BUILDING - ABOVE GRADE
- ⑤ PIPE TO SPRINKLER SYSTEM
- ⑥ PIPE TO WATER MAIN

**WET-PIPE RISER CHECK DIAGRAM**

NO SCALE



APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_

SEAL: \_\_\_\_\_

AVR INFO: \_\_\_\_\_

ACTIVITY: \_\_\_\_\_

SATISFACTORY TO: \_\_\_\_\_ DATE: \_\_\_\_\_

DES: SLW | DRW: SLW | CHK: DPS

PM/DM: M. PERRY/L. SANDERS

BRANCH MANAGER: \_\_\_\_\_

CHIEF ENG/ARCH: \_\_\_\_\_

FIRE PROTECTION: \_\_\_\_\_

NAVFAC DRAWING NO.: 12701662

PROJECT NO.: 1291639

CONSTR. CONTR. NO.: \_\_\_\_\_

SHEET 66 OF 109

F-001

DRAWN: \_\_\_\_\_

CHECKED: \_\_\_\_\_

DATE: \_\_\_\_\_

SCALE: \_\_\_\_\_

REVISIONS: \_\_\_\_\_

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GENERAL SHEET NOTES

- THE EXISTING FIRE ALARM CONTROL PANEL IS IN BUILDING SP-250 NEAR THE QUARTERDECK. THE EXISTING FIRE REPORTING MASTER BOX IS IN THE MAIN TELECOM ROOM OF BUILDING SP-250, SEE SHEET F-002.

NO.	DATE	DESCRIPTION



NEW WORK KEYNOTES

- PROVIDE A WET PIPE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13 FOR ALL AREAS WITHIN THIS DASHED AREA.
- PROVIDE SMOKE DETECTOR ON WALL ABOVE NAC PANEL.
- CONNECT TO WATER MAIN, SEE CIVIL SHEET CU-102.
- WET PIPE FIRE SPRINKLER RISER.
- PROVIDE ELECTRIC BELL THAT RINGS ONLY WHEN FIRE SPRINKLER WATERFLOW SWITCH ACTIVATES.
- PROVIDE FLOW SWITCH/ZONE CONTROL ASSEMBLY FOR ROOM 102. FLOW SWITCH WITH AUXILIARY CONTACT (AND NO RETARD) SHALL CONNECT TO SHUNT TRIP BREAKER AND SHALL SHUT DOWN THE SIMULATORS AND ASSOCIATED ELECTRICAL EQUIPMENT. EXTEND DRAIN/TEST LINE TO THE EXTERIOR.
- PIPING TO FIRE SPRINKLER SYSTEM.
- PROVIDE AT LEAST ONE RE-ENTERABLE FIRESTOPPING DEVICE FOR TELECOM AND DATA CABLING.
- PROVIDE NAC PANELS AS NEEDED AND CONNECT NAC PANEL TO EXISTING FIRE ALARM CONTROL PANEL OR TO THE EXISTING SLC.
- PROVIDE CO DETECTOR ON WALL 7'-0" AFF. SHUT DOWN FUEL-FIRED EQUIPMENT AND ASSOCIATED HVAC UNITS.
- PROVIDE CO DETECTOR ON WALL 7'-0" AFF OR LOCATE ON CEILING 5 FEET FROM FUEL-FIRED EQUIPMENT. SHUT DOWN FUEL-FIRED EQUIPMENT AND ASSOCIATED HVAC UNITS.

APPROVED	A/E INFO
FIR COMMANDER NAVFAC	ACTIVITY
SATISFACTORY TO	DATE
DES: SLW	DRAW: SLW
CHK: LRP	
BRANCH MANAGER	
CHIEF ENGR/ARCH	
FIRE PROTECTION	

DEPARTMENT OF THE NAVY  
 NAVAL FACILITIES ENGINEERING COMMAND  
 NAVAL FACILITIES ENGINEERING COMMAND - MIDATLANTIC  
 HAMPTON ROADS IPT  
 NAVAL STATION NORFOLK  
 NORFOLK, VIRGINIA

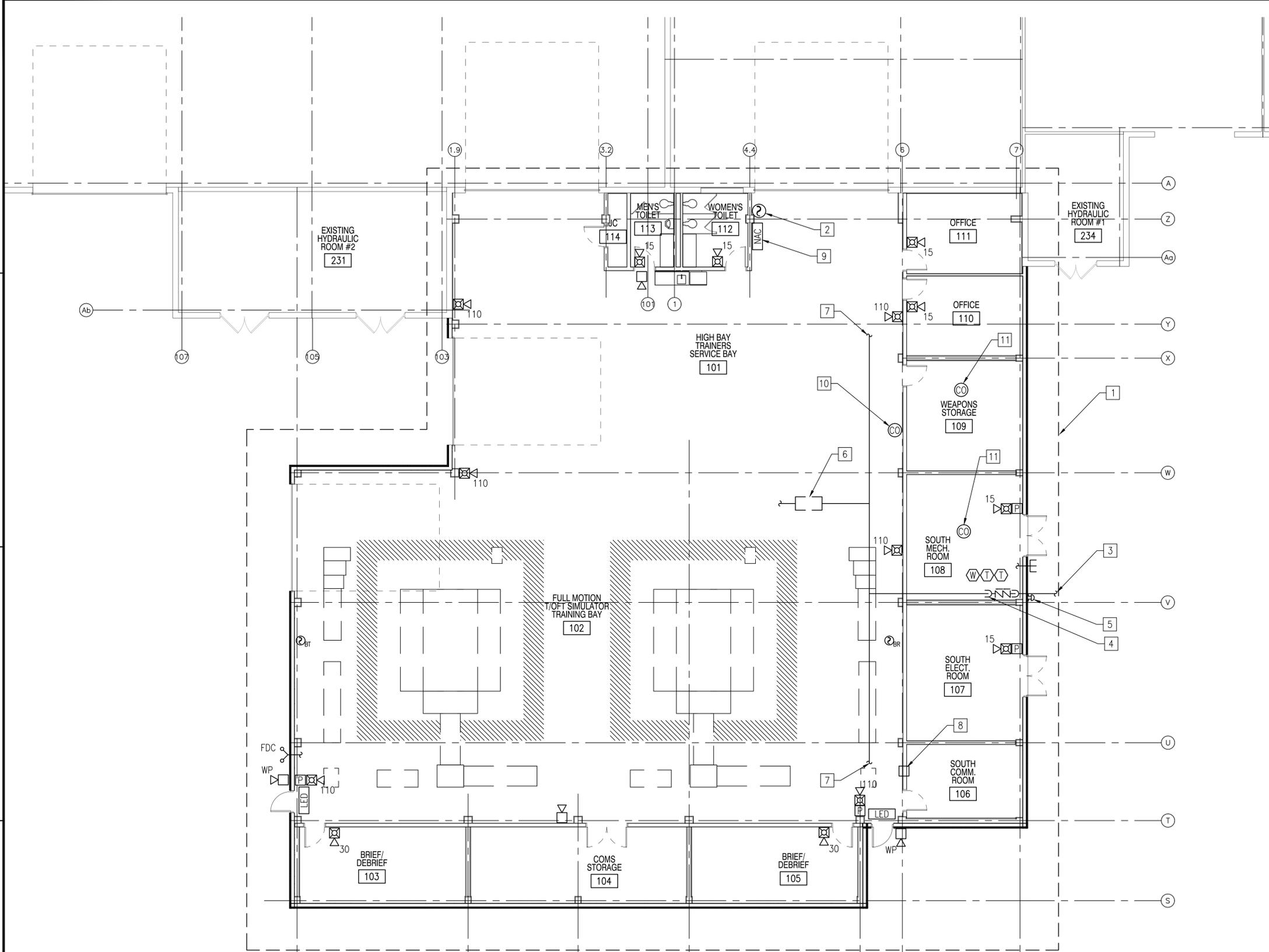
FY 2016 P-518  
 MH-60 AVET TRAINING FACILITY  
 BUILDING ADDITION FLOOR PLAN

SCALE:	AS NOTED
PROJECT NO.:	1291639
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12701664
SHEET	68 OF 109
<b>F-101</b>	

GRAPHIC SCALE



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



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 FILE NAME: P:\VA\NavalStationNorfolk\MLCOM\2016\_1291639\_P-518\_DBB\_MH-60\_AVET\_Training\_Facility\B\_Design\Drawings\Sheet Files\11\_Fire Protection\101.dwg LAYOUT NAME: F-101 PLOTTED: Monday, October 19, 2016 - 4:58pm USER: steven.williams3