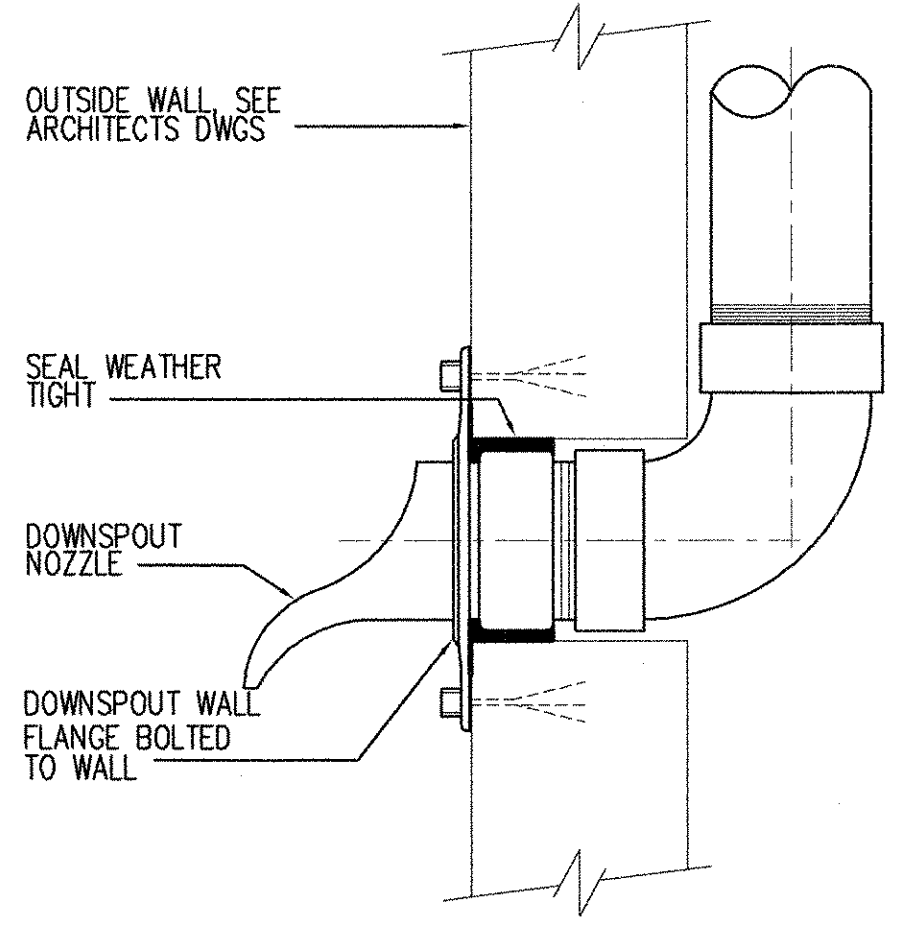
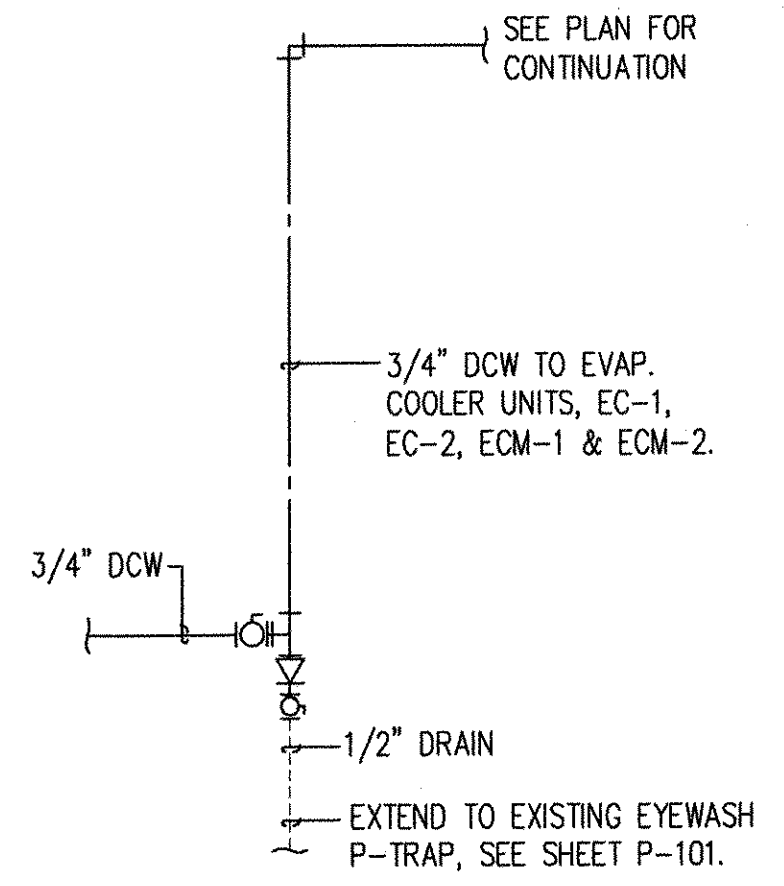


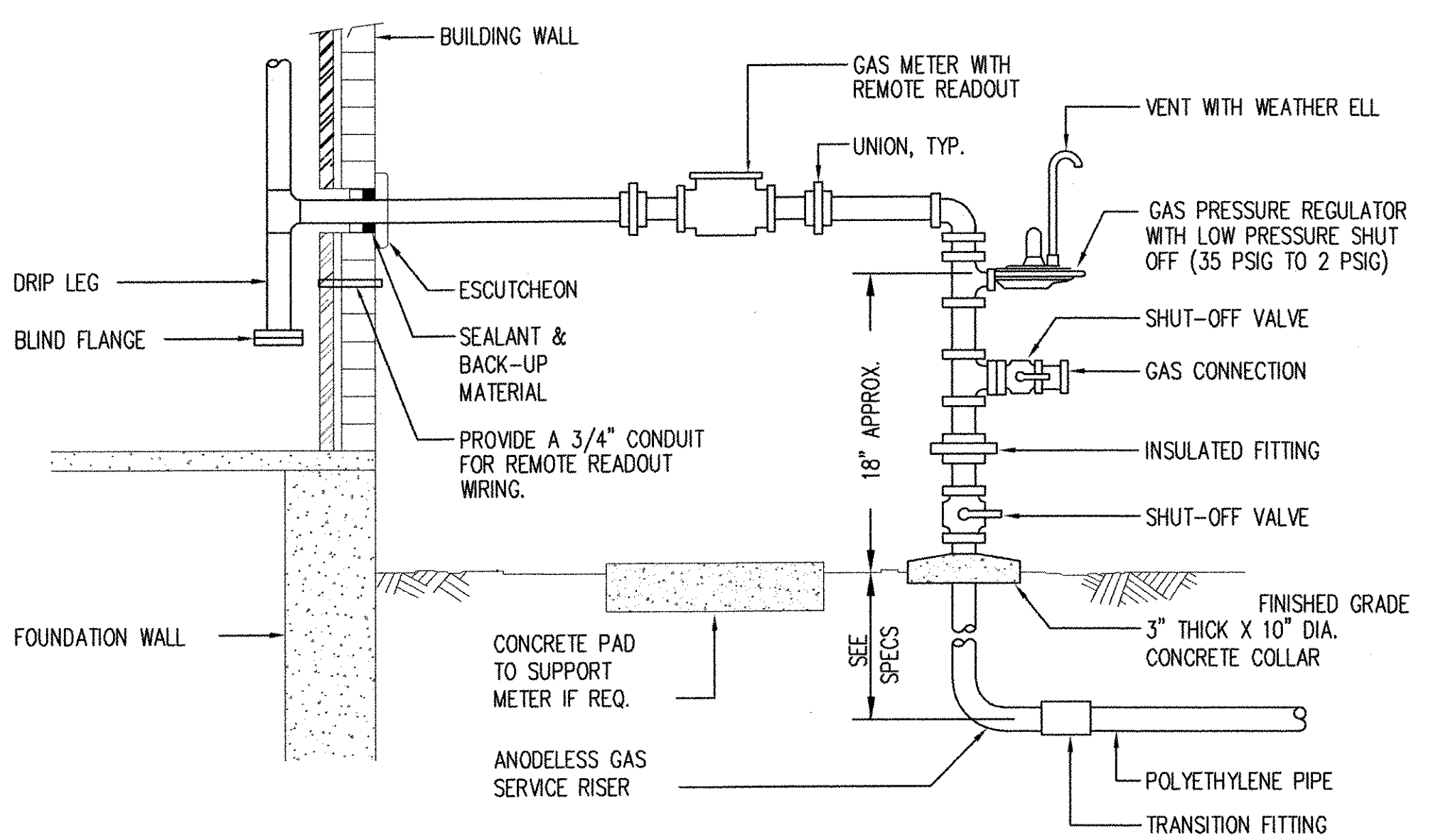
ROOF DRAIN DETAIL
SCALE: NONE
P-103 P-001



DOWNSPOUT NOZZLE AT WALL DETAIL
SCALE: NONE
P-101 P-001



EVAP COOLER SUPPLY/DRAIN DETAIL
SCALE NONE
P-101 P-001



GAS METER AND REGULATOR DETAIL
SCALE NONE
P-101,102 P-001

FIRE SPRINKLER SYSTEM DESIGN CRITERIA

A. DESIGN DENSITIES AND AREAS OF APPLICATION SHALL MEET THE MINIMUM REQUIREMENTS OF NFPA 13 AND UFC 3-600-1 AS OUTLINED BELOW:

- EXISTING AREAS OF THE BUILDING: 0.15 GPM/SQ. FT. OVER 3,056 SQ. FT. WITH SYSTEM DEMAND OF 545.6 GPM.
- NEW BUILDING ADDITION: ORDINARY HAZARD GROUP 2, 0.20 GPM/SQ. FT. OVER 3,000 SQ. FT. WITH 500 GPM HOSE STEAM.

B. MAXIMUM COVERAGE PER SPRINKLER HEAD.

- ORDINARY HAZARD: 130 SQ. FT.

C. MAXIMUM VELOCITY IN HYDRAULIC CALCULATIONS FOR FIRE SPRINKLER SYSTEM SHALL NOT EXCEED 20 FT/SEC.

D. THE DESIGN AREA SHALL BE THE HYDRAULICALLY MOST REMOTE RECTANGULAR AREA HAVING A DIMENSION PARALLEL TO THE BRANCH LINE EQUAL TO, OR GREATER THAN, 1.4 TIMES THE SQUARE ROOT OF THE AREA OF SPRINKLER OPERATION.

E. HYDRAULIC CALCULATIONS FOR THE FIRE SPRINKLER SYSTEM SHALL EXTEND TO THE POINT OF CONNECTION WITH THE MAIN. THE CONTRACTOR SHALL PERFORM A FLOW TEST TO DETERMINE THE PRESSURES AND FLOW FOR THE FIRE SPRINKLER SYSTEM. COORDINATE FLOW TEST WITH THE CONTRACTING OFFICER.

THE FOLLOWING INFORMATION IS FROM THE BASE OF THE EXISTING TO BE REMOVED RISER:

STATIC PRESSURE: 70 PSI
RESIDUAL PRESSURE: 58.1 PSI
FLOW: 545.6 GPM

F. A MINIMUM 10% PRESSURE CUSHION SHALL BE PROVIDED IN ALL HYDRAULIC CALCULATIONS.

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	DOMESTIC WATER		SOIL WASTE	VENT	REMARKS
		COLD	HOT			
RD	ROOF DRAIN					
SRD	SECONDARY ROOF DRAIN					
DN	DOWNSPOUT NOZZLE					
CO	CLEAN OUT					
COTG	CLEAN OUT TO GRADE					
EWC	ELECTRIC WATER COOLER	1/2"	-	1-1/2"	1-1/2"	1-1/4" P-TRAP (PVC)

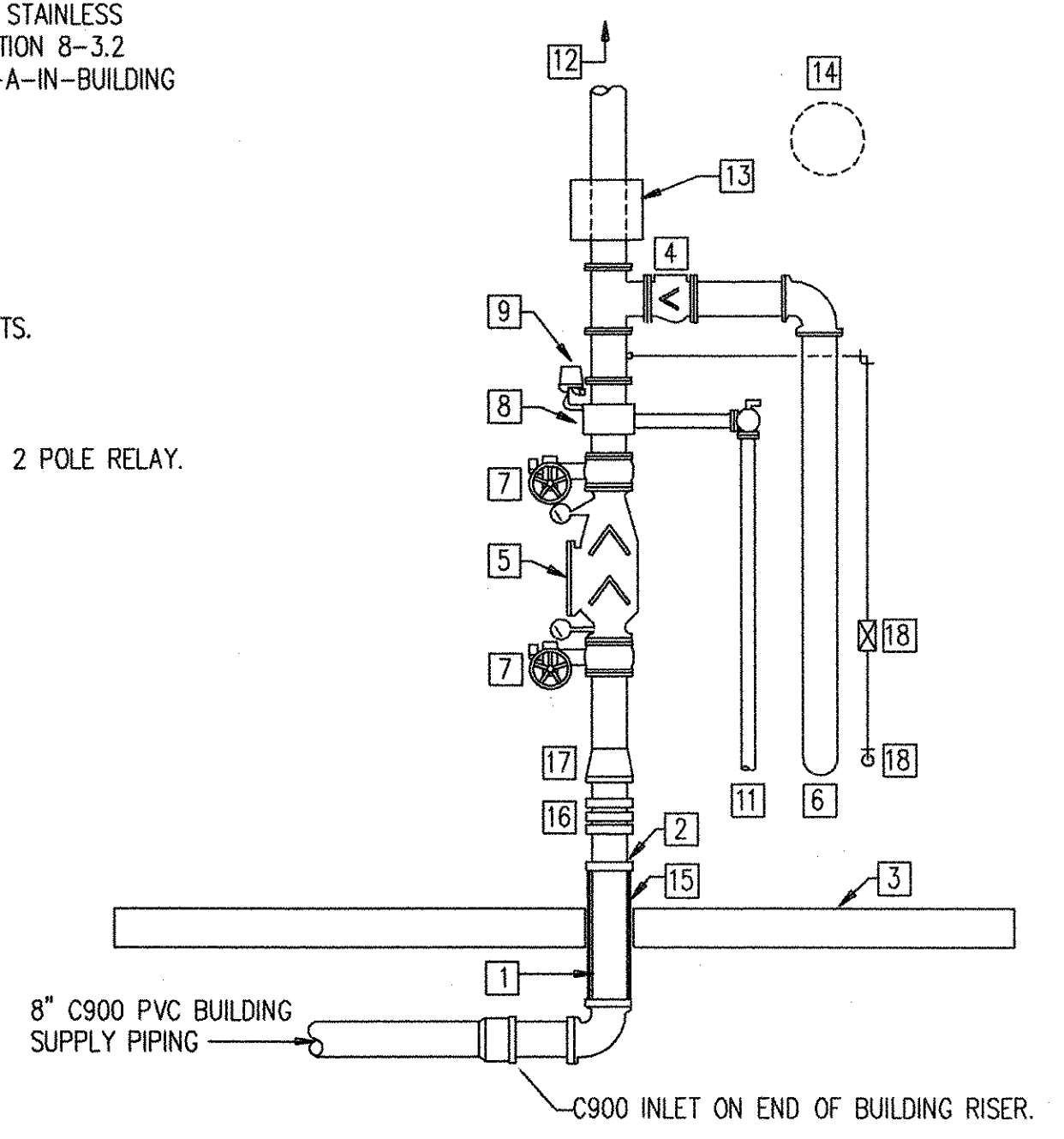
PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	DOMESTIC COLD WATER	— —	DROP IN PIPE
---	SEWER OR WASTE	— —	RISE IN PIPE
—G—	NATURAL GAS	— —	VALVE IN RISE
—SS—	SANITARY SEWER - (OUTSIDE)	— —	UNION
—SD—	STORM DRAIN	— —	BALL VALVE
—RD—	ROOF DRAIN LEADER	— —	CONCENTRIC REDUCER
—SRD—	SECONDARY ROOF DRAIN LEADER	— —	CLEAN OUT
DCW	DOMESTIC COLD WATER	— —	CLEAN OUT TO GRADE

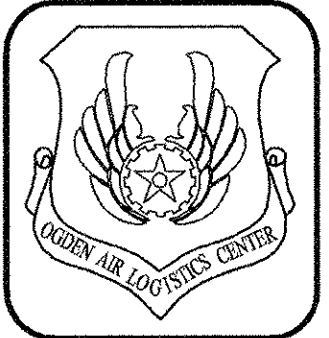
GENERAL PLUMBING NOTES

- THE CONTRACTOR SHALL VERIFY ALL PLUMBING FIXTURES, EQUIPMENT REQUIREMENTS AND LOCATIONS, AND ALL RELATED UTILITIES WITH THE MECHANICAL AND ARCHITECTURAL PLANS AND SPECIFICATIONS AND SHALL PROVIDE ALL SERVICES AS REQUIRED.
- FIXTURES AND ACCESSORIES SHALL BE AS SPECIFIED. EACH ITEM SHALL BE COMPLETE WITH CHROME-PLATED BRASS TRIM. SEE SPECIFICATIONS.
- ALL PLUMBING SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE INTERNATIONAL PLUMBING CODE AND/OR BASE REQUIREMENTS.

- 8" SINGLE PIECE STAINLESS STEEL IN-BUILDING RISER CONNECTED TO FIRE LINE FROM EXTERIOR. DO NOT CONNECT TO OVERHEAD PIPING WITHOUT VERIFICATION THAT UNDERGROUND HAS BEEN FLUSHED AND PRESSURE TESTED PER NFPA 24. IN BUILDING RISER TO BE CORROSION RESISTANT STAINLESS STEEL TYPE 304 SST, UL/FM APPROVED MEETING NFPA 24 SECTION 8-3.2 WITH AWWA C900 INLET/DIP AND AWWA C606 OUTLET, AMES S-A-IN-BUILDING RISER.
- 8" GROOVED FITTING PROVIDED IN MECHANICAL ROOM.
- CONCRETE FLOOR
- CHECK VALVE
- AMES DOUBLE CHECK VALVE ASSEMBLY WITH FOUR TEST OUTLETS. PROVIDE TEST STATION AS PER IFC REQUIREMENTS.
- EXTEND 4" PIPE TO TWO-WAY SIAMESE FIRE DEPT. CONN.
- BUTTERFLY CONTROL VALVE WITH BUILT-IN TAMPER SWITCH WITH 2 POLE RELAY.
- MAIN DRAIN AND TEST ASSEMBLY SIZED TO MEET FULL FLOW TEST REQUIREMENTS, (2" MINIMUM).
- FLOW TYPE WATER FLOW SWITCH.
- 2" ANGLE VALVE FOR MAIN DRAIN SIZED TO MEET FULL FLOW TEST REQUIREMENTS, (2" MINIMUM).
- EXTEND DRAIN LINE TO DISCHARGE TO EXTERIOR.
- SUPPLY TO BUILDING FIRE SPRINKLER SYSTEM.
- HYDRAULIC DESIGN INFORMATION PLACARDS.
- 10" ELECTRIC BELL MOUNTED ON EXTERIOR WALL
- TIE RODS AND PIPE SLEEVE THRU FLOOR SLAB WITH WATER PROOF SEALANT. SEE SPECIFICATIONS. PIPE SLEEVE SIZE TO PROVIDE 2" ANNULAR SPACE AROUND PIPE RISER.
- FLEXIBLE CONNECTION, SEE SPECIFICATIONS
- CONCENTRIC REDUCER (WHEN VERIFIED BY HYDRAULIC CALCULATIONS)
- 1" FLOW TEST PIPE WITH INSPECTORS TEST VALVE ASSEMBLY. EXTEND TO EXTERIOR FACE OF WALL AND TERMINATE WITH 45 DEGREE ELBOW DIRECTED AWAY FROM BUILDING.

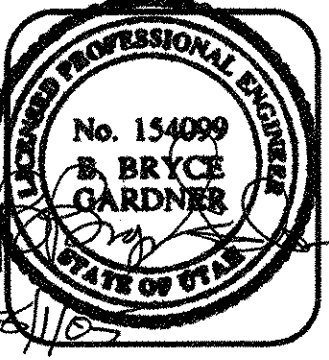


FIRE PROTECTION RISER
SCALE: NONE
P-101 P-001



DATE: _____

DESCRIPTION: _____



DESIGNED BY: R. KESLER
DRAWN BY: G. MANSON
PROJECT NUMBER: KFSM 082030
GOVERNMENT REVIEW: _____

CHECKED BY: B. GARDNER

HILL AIR FORCE BASE
DEPARTMENT OF THE AIR FORCE
ODDEN AIR LOGISTICS CENTER
775TH CIVIL ENGINEERING SQUADRON

CONSTRUCT 2 STORY ADDITION
EAST SIDE BUILDING 265
PLUMBING SCHEDULE, DETAILS
AND SYMBOL LEGEND