FIRE PROTECTION SPECIFICATIONS

GENERAL

- A. THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, "AIA DOCUMENT A201, LATEST EDITION, AND THESE SPECIFICATIONS AS APPLICABLE ARE OF THIS CONTRACT.
- B. ALL APPLICABLE CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR WHO SHALL INFORM THE OWNER, PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIAL WHICH VIOLATES ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED BY THE CONTRACTOR AT NO
- C. INVESTIGATE EACH SPACE THROUGH WHICH EQUIPMENT MUST BE MOVED. WHERE NECESSARY, EQUIPMENT SHALL BE SHIPPED FROM MANUFACTURER IN SECTIONS OF SIZE SUITABLE FOR MOVING THROUGH AVAILABLE RESTRICTIVE SPACES. ASCERTAIN FROM BUILDING OWNER AND TENANT AT WHAT TIMES OF DAY EQUIPMENT MAY BE MOVED THROUGH
- D. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. PIPE ROUTING IS SHOWN DIAGRAMMATICALLY AND DOES NOT SHOW ALL OFFSETS DROPS AND RISES OF RUNS. THE CONTRACTOR SHALL ALLOW IN HIS PRICE FOR ROUTING OF PIPE TO AVOID OBSTRUCTIONS. COORDINATION WITH THE EXISTING SERVICES, INCLUDING THOSE OF OTHER TRADES IS REQUIRED. MAINTAIN HEADROOM AND SPACE CONDITIONS.
- E. INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES, WHICH INVOLVE EXTRA COST, SHALL NOT BE MADE WITHOUT APPROVAL.
- F. REMOVAL AND RELOCATION OF CERTAIN EXISTING WORK WILL BE NECESSARY FOR THE PERFORMANCE OF THE GENERAL WORK. ALL EXISTING CONDITIONS CANNOT BE COMPLETELY DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL SURVEY THE SITE AND INCLUDE ALL CHANGES IN MAKING UP THE WORK PROPOSAL.
- G. CONNECTIONS TO EXISTING WORK: INSTALL NEW WORK AND CONNECT TO EXISTING WORK WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES. TEMPORARY SHUTDOWNS OF EXISTING SERVICES SHALL BE PERFORMED AT NO ADDITIONAL CHARGES, AT TIMES NOT TO INTERFERE WITH NORMAL OPERATION OF EXISTING FACILITIES AND ONLY WITH WRITTEN CONSENT OF OWNER. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES AS REQUIRED WITH NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING WORK. CONNECT NEW WORK TO EXISTING WORK IN NEAT AND ACCEPTABLE MANNER. RESTORE EXISTING DISTURBED WORK TO ORIGINAL CONDITION.
- H. DISCONNECT, REMOVE AND/OR RELOCATE EXISTING MATERIAL, EQUIPMENT AND OTHER WORK AS NOTED OR REQUIRED FOR PROPER INSTALLATION OF NEW WORK.
- THE CONTRACTOR SHALL KEEP ALL EQUIPMENT AND MATERIALS, AND ALL PARTS OF THE BUILDING, EXTERIOR SPACES AND ADJACENT STREETS, SIDEWALKS AND PAVEMENTS, FREE FROM MATERIAL AND DEBRIS RESULTING FROM THE EXECUTION OF THIS WORK. EXCESS MATERIALS WILL NOT BE PERMITTED TO ACCUMULATE EITHER ON THE INTERIOR OR THE
- J. THE LOCATIONS OF THE EXISTING SERVICES ARE BELIEVED TO BE AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION OF THESE SERVICES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING ANY WORK.
- K. WHERE THERE ARE DISCREPANCIES IN SIZES BETWEEN THE PLANS THE RISER DIAGRAMS AND ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL BRING THE DISCREPANCY TO THE ATTENTION OF THE ENGINEER FOR A CLARIFICATION OR SHALL MAKE ALLOWANCE FOR THE MORE STRINGENT OF THE SIZE IN THE BUDGET.
- L. SEAL OPENINGS THROUGH PARTITIONS, WALLS AND FLOORS WITH AN APPROVED NON-SHRINKING FIREPROOF CAULKING OR OTHER APPROVED NONCOMBUSTIBLE MATERIAL.
- M. PROVIDE ALL NECESSARY FLASHING AND COUNTER FLASHING TO MAINTAIN THE WATERPROOFING INTEGRITY OF THIS BUILDING AS REQUIRED BY THE INSTALLATION OR REMOVAL OF PIPING AND EQUIPMENT. PROVIDE EQUIPMENT CURBS AS REQUIRED.
- N. ALL PRESENT MATERIAL. EQUIPMENT AND CONSTRUCTION DEBRIS TO BE REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR WITH THE EXCEPTION OF SPECIFIC EQUIPMENT AND APPARATUS REQUESTED BY THE BUILDING REPRESENTATIVE, ARCHITECT OR AS NOTED TO BE RELOCATED ON THE DRAWINGS. REMOVED EQUIPMENT SHALL BE PROPERLY DISPOSED OF BY THIS CONTRACTOR.
- O. MATERIALS AND WORKMANSHIP, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.
- P. THE WORK IN THE BUILDING SHALL BE DONE WHEN AND AS DIRECTED, AND IN A MANNER SATISFACTORY TO THE OWNER. THE WORK SHALL BE PERFORMED SO AS TO CAUSE THE LEAST POSSIBLE INCONVENIENCE AND DISTURBANCE TO THE PRESENT OCCUPANTS.
- Q. THE CONTRACTOR'S PROPOSAL FOR ALL WORK SHALL BE PREDICATED ON THE PERFORMANCE OF THE WORK DURING REGULAR WORKING HOURS. WHEN SO DIRECTED, HOWEVER, THE CONTRACTOR SHALL INSTALL WORK IN OVERTIME AND THE ADDITIONAL COST TO BE CHARGED THEREFORE SHALL BE ONLY THE "PREMIUM" PORTION OF THE WAGES PAID.
- R LINESS OTHERWISE SPECIFICALLY SPECIFIED INCLUDE ALL CUTTING AND PATCHING OF EXISTING FLOORS, WALLS, PARTITIONS AND OTHER MATERIALS IN THE EXISTING BUILDING THE CONTRACTOR SHALL RESTORE THESE AREAS TO ORIGINAL CONDITION.
- S. ALL MATERIAL AND EQUIPMENT TO BE NEW UNLESS OTHERWISE NOTED AND SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.
- T. SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF THE EXISTING BUILDING, EQUIPMENT, ETC., WHICH CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. THE CONTRACTOR IS RESPONSIBLE TO INDICATE ANY DISCREPANCIES BETWEEN THE CONTRACT DRAWINGS AND ACTUAL FIELD CONDITIONS PRIOR TO SUBMITTAL OF BID. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS SHALL NOT BE MADE FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH AN EXAMINATION. THE ON-SITE INSPECTION SHALL VERIFY EXISTING PIPE SIZES, CLEARANCES, ETC. AND CONDITIONS.
- U. INSURANCE: IN ACCORDANCE WITH BUILDING REQUIREMENTS AND SHALL INCLUDE A HOLD HARMLESS CLAUSE FOR OWNER AND ENGINEER.
- V THE FINAL ACCEPTANCE WILL BE MADE AFTER THE CONTRACTOR HAS ADJUSTED HIS EQUIPMENT, TESTED THE VARIOUS SYSTEMS, DEMONSTRATED THAT IT FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL THE REQUIRED CERTIFICATES OF INSPECTION AND APPROVAL.

SCOPE OF WORK

- A. SCOPE OF WORK SHALL CONSIST OF PROVIDING LABOR, MATERIALS, EQUIPMENT, SERVICES AND FEES NECESSARY FOR COMPLETE AND SAFE INSTALLATION IN CONFORMITY WITH THE NEW YORK CITY BUILDING CODE AND ALL OTHER APPLICABLE INDUSTRY, NATIONAL AND LOCAL CODES AND AUTHORITIES HAVING JURISDICTION, AS INDICATED ON DRAWINGS AND HEREIN SPECIFIED.
- B. THE BASE BUILDING DRAWINGS, PLANS, DETAILS, SPECIFICATIONS AND SPECIFICATION ADDENDA ARE MADE OF THIS CONTRACT AND SHALL APPLY TO ALL WORK UNDER THE CONTRACT UNLESS OTHERWISE AMENDED, MODIFIED, SUPPLEMENTED OR SPECIFIED HEREIN
- C. THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN ONE YEAR FROM THE DATE OF FINAL CERTIFICATE FOR PAYMENT AND/OR FROM DATE OR ACTUAL USE OF EQUIPMENT OR OCCUPANCY OF SPACES BY OWNER INCLUDED UNDER THE VARIOUS PARTS OF THE WORK, WHICHEVER DATE IS EARLIER. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL ALSO PROVIDE THAT WHERE DEFECTS OCCUR. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENT SUPPLIED BY THE CONTRACTOR.
- D. THE CONTRACTOR SHALL GIVE NECESSARY NOTICE, FILE DRAWINGS AND SPECIFICATIONS WITH THE DEPARTMENT HAVING JURISDICTION, OBTAIN PERMITS OR LICENSES NECESSAR TO CARRY OUT THIS WORK AND PAY ALL FEES THEREFORE. THE CONTRACTOR SHALL ARRANGE FOR INSPECTION AND TESTS OF ANY OR ALL PARTS OF THE WORK IF SO REQUIRED BY AUTHORITIES AND PAY ALL CHARGES FOR SAME. THE CONTRACTOR SHALL PAY ALL COSTS FOR, AND FURNISH TO THE OWNER BEFORE FINAL BILLING, ALL CERTIFICATES NECESSARY AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH ALL REGULATIONS WHERE THEY APPLY TO THIS WORK.

SHOP DRAWINGS

- A. PRIOR TO THE INSTALLATION OF ANY WORK AND PROCUREMENT OF EQUIPMENT PROVIDE COMPLETE SET OF COORDINATED SHOP DRAWINGS OF ALL NEW AND EXISTING EQUIPMENT, INDICATING CAPACITY DIMENSIONS AND SEQUENCE OF OPERATION FOR WRITTEN APPROVAL BY THE ARCHITECT AND ENGINEER.
- B. INDICATE ON EACH SHOP DRAWINGS SUBMITTED
- PROJECT NAME AND LOCATION.
- NAME OF ARCHITECT AND ENGINEER.
- ITEM IDENTIFICATION.
- APPROVAL STAMP OF PRIME CONTRACTOR.

C. SUBMISSIONS

- 1) SUBMISSIONS 11" X 17" OR SMALLER: IF THE SUBMISSION IS A CATALOG CUT, THEN THE CONTRACTOR SHALL SUBMIT ONE ORIGINAL AND TWO COPIES. OTHERWISE, HE SHALL SUBMIT THREE COPIES. THE ARCHITECT WILL FORWARD THE ORIGINAL AND ONE COPY (TWO COPIES WHEN NO ORIGINAL IS RECEIVED) TO THE ENGINEER. ALL CATALOG CUTS SHALL BE COMPLETE.
- 2) SUBMISSIONS LARGER THAN 11" X 17": SUBMIT TWO PRINTS TO THE ARCHITECT. THE ARCHITECT WILL FORWARD ONE PRINT TO THE ENGINEER.
- 3) AS AN ALTERNATE, ELECTRONIC FILES MAY BE ACCEPTABLE IN PDF FORMAT.
- D. SUBMIT SHOP DRAWINGS FOR THE FOLLOWING:
- PIPE AND FITTINGS.
- VALVES.
- SPRINKLER HEADS.
- PIPING LAYOUTS.
- HYDRAULIC CALCULATIONS.

6) SUPPORTS, HANGERS AND GUIDES.

- 4. AS-BUILT DRAWINGS AND EQUIPMENT OPERATIONAL INSTRUCTIONS
- A. UPON COMPLETION AND ACCEPTANCE OF WORK, CONTRACTOR SHALL FURNISH WRITTEN INSTRUCTIONS AND FOLIPMENT MANUALS AND DEMONSTRATE TO THE OWNER THE PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT AND APPARATUS FURNISHED UNDER THIS
- B. THESE INSTRUCTIONS SHALL BE TYPED ON 8-1/2" X 11" PAPER AND BOUND IN THREE RING BINDERS WITH CLEAR ACETATE COVERS. CONTRACTOR SHALL GIVE THREE COPIES OF THE INSTRUCTIONS TO THE OWNER AND ONE COPY TO THE ENGINEER.

CONDITIONS OF THE WORK. "AS-BUILT" DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT

- C. THE INSTRUCTION BOOKLET SHALL BEAR THE NAME, ADDRESS AND TELEPHONE NUMBER OF E PROJECT, ARCHITECT AND ENGINEER.
- D. REPRODUCIBLE "AS-BUILT" DRAWINGS SHALL BE PROVIDED INDICATING THE AS INSTALLED

GENERAL PROVISIONS FOR FIRE PROTECTION WORK

AFTER COMPLETION OF THE INSTALLATION.

- A. SPECIFICATIONS ARE OF SIMPLIFIED FORM AND INCLUDE INCOMPLETE SENTENCES. WORDS OR PHRASES SUCH AS "THE CONTRACTOR SHALL," "SHALL BE," "FURNISH," "PROVIDE," "A," "THE " AND "ALL" HAVE BEEN OMITTED FOR BREVITY
- B. COORDINATE ALL NEW FIRE PROTECTION WORK WITH ALL EXISTING AND/OR NEW DUCTWORK, PIPING AND UTILITIES OF ANY SYSTEMS. DRAWINGS ARE DIAGRAMMATIC AND SHOW THE INTENT OF THE DESIGN. REROUTE ANY PIPING AROUND EXISTING AND/OR NEW SYSTEMS INCLUDING ALL REQUIRED FITTINGS AND SUPPORTS TO MAKE THE INSTALLATION OF THE PIPING AND SPRINKLER HEADS POSSIBLE. RESEAL ANY FIRE AND/OR SMOKE RATED PENETRATIONS THAT HAVE BEEN AFFECTED AS A RESULT OF THE MODIFICATION.
- C. REMOVE RELOCATE AND RECONNECT ANY EXISTING PIPING THAT SHALL REMAIN ACTIVE IN SERVICE WHICH INTERFERES WITH THE NEW ARCHITECTURAL LAYOUT, CEILING DEVICES, EQUIPMENT. NEW CEILING HEIGHTS AND ANY UNFORESEEN CONDITION ARISING FROM THE NEW MODIFICATIONS. ALL EXISTING AND NEW PIPING SHALL BE LOCATED CONCEALED BEHIND NEW FINISHED WALLS AND ABOVE NEW CEILINGS WHETHER SPECIFICALLY MENTIONED OR
- D. PROVIDE SPRINKLER HEADS ABOVE AND BELOW ALL SUSPENDED CEILING AREAS HAVING WOOD COMBUSTIBLE CONSTRUCTION.
- E. PROVIDE SPRINKLER HEADS BELOW ALL DUCTWORK AND SUSPENDED EQUIPMENT THAT ARE 4 FEET AND WIDER. PROVIDE WIRE GUARD PROTECTION FOR ALL SPRINKLER HEADS IN THESE

- 1) "PROVIDE": TO SUPPLY, INSTALL AND CONNECT UP COMPLETE AND READY FOR SAFE AND REGULAR OPERATION THE PARTICULAR WORK REFERRED TO UNLESS SPECIFICALLY OTHERWISE NOTED.
- 2) "INSTALL": TO ERECT, MOUNT AND CONNECT COMPLETE WITH RELATED ACCESSORIES.
- 3) "FURNISH" OR "SUPPLY: TO PURCHASE, PROCURE, ACQUIRE AND DELIVER COMPLETE
- 4) "WORK": LABOR, MATERIALS, EQUIPMENT, APPARATUS, CONTROLS, ACCESSORIES AND OTHER ITEMS REQUIRED FOR PROPER AND COMPLETE INSTALLATION.
- 5) "CONCEALED": EMBEDDED IN MASONRY OR OTHER CONSTRUCTION, INSTALLED IN FURRED SPACES, WITHIN DOUBLE PARTITIONS OR HUNG CEILINGS, IN TRENCHES, IN CRAWL SPACES, OR IN ENCLOSURES.
- 6) "EXPOSED": NOT INSTALLED UNDERGROUND OR "CONCEALED" AS DEFINED ABOVE.
- 7) "SIMILAR" OR "EQUAL": EQUAL IN MATERIALS, WEIGHT, SIZE, DESIGN AND EFFICIENCY OF SPECIFIED PRODUCT

G. QUALITY ASSURANCE

WITH RELATED ACCESSORIES

- 1) QUALITY AND GAUGE OF MATERIALS: NEW, BEST OF THEIR RESPECTIVE KINDS, FREE FROM DEFECTS AND IF APPLICABLE LISTED BY UNDERWRITERS LABORATORIES, INC., AND FACTORY MUTUAL INC. OR BEARING THEIR LABEL. MATERIALS AND EQUIPMENT OF SIMILAR APPLICATION SHALL BE OF SAME MANUFACTURER, EXCEPT AS NOTED.
- 2) GUARANTEE: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE OF WORK.
- 3) INSTALLER'S RESPONSIBILITIES INCLUDE DESIGNING, FABRICATING AND INSTALLING SPRINKLER SYSTEMS AND PROVIDING PROFESSIONAL ENGINEERING SERVICES NEEDED TO ASSUME ENGINEERING RESPONSIBILITY. BASE CALCULATIONS ON RESULTS OF A
- 4) ENGINEERING RESPONSIBILITY: PREPARATION OF WORKING PLANS, CALCULATIONS AND
- FIELD TEST REPORTS SHALL BE PROVIDED BY A QUALIFIED PROFESSIONAL ENGINEER. 5) THE CONTRACT DRAWINGS SHOW THE INTENT OF THE DESIGN AND SHALL BE USED TO ESTABLISH THE BASIS OF DESIGN. THE CONTRACT DRAWINGS SHALL NOT BE USED AS THE BASIS FOR FINAL INSTALLATION AND CONSTRUCTION OF THE FIRE PROTECTION
- 6) THE FIRE PROTECTION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITIES IN PROVIDING A DESIGN AND INSTALLATION OF THE FIRE PROTECTION SYSTEM IN FULL COMPLIANCE WITH NFPA-13, NFPA 14; NFPA-20 AND ANY REQUIRED GOVERNING CODES AND REGULATIONS INCLUDING BUT NOT LIMITED TO THE REQUIREMENTS OF THE LOCAL
- AUTHORITY HAVING JURISDICTION. 7) THE FIRE PROTECTION SYSTEM CONTRACTOR SHALL ASSUME ALL RESPONSIBILITIES FOR A FULLY SPRINKLERED BUILDING, FUNCTIONAL, OPERATIONAL, CODE COMPLIANT

AND APPROVED SYSTEM. H. PRODUCT DELIVERY, STORAGE AND HANDLING

- 1) MOVING OF EQUIPMENT: WHERE NECESSARY, SHIP IN CARTED SECTIONS OF SIZE TO PERMIT PASSING THROUGH AVAILABLE SPACES.
- 2) ACCESSIBILITY: FOR OPERATION, MAINTENANCE AND REPAIR, MINOR DEVIATIONS SHALL BE PERMITTED. CHANGES OF MAGNITUDE OR INVOLVING EXTRA COST ARE NOT PERMISSIBLE WITHOUT REVIEW.
- I. BRUSH AND CLEAN WORK PRIOR TO CONCEALING, PAINTING AND ACCEPTANCE. PAINTED EXPOSED WORK THAT IS SOILED OR DAMAGED. CLEAN AND REPAIR TO MATCH ADJOINING WORK BEFORE FINAL ACCEPTANCE. REMOVE DEBRIS FROM INSIDE AND OUTSIDE OF
- J. FINAL LOCATIONS AND MOUNTING ORIENTATIONS OF ALL VISIBLE FIRE PROTECTION EQUIPMENT TO BE VERIFIED BY ARCHITECT.
- K. ALL ACCESS DOOR LOCATIONS SHALL BE REVIEWED BY ARCHITECT PRIOR TO INSTALLATION.
- L. SPRINKLER SYSTEM DESIGN CRITERIA REFER TO NOTES ON COVER SHEET

MATERIAL AND EQUIPMENT.

PRODUCTS

A. ESCUTCHEONS

1) ALL EXPOSED PIPING PASSING THROUGH WALLS, FLOORS, PARTITIONS AND CEILINGS SHALL BE PROVIDED WITH CHROME PLATED CAST BRASS ESCUTCHEONS HELD IN PLACE WITH SETSCREWS.

VALVES

A. ALL VALVES SHALL BE ACCESSIBLE.

- 1) 2" AND SMALLER: PROVIDE STOCKHAM FIGURE B-64 (GLOBE)/B-264 (ANGLE) 200 WWP BRONZE GLOBE VALVE WITH THREADED ENDS OR APPROVED EQUAL
- C. TEST/DRAIN VALVES
- 1) 1-1/4": PROVIDE G/J INNOVATIONS "SURE-TEST" INSPECTORS TEST AND DRAIN VALVE. D. WHERE APPLICABLE, ALL FIRE PROTECTION COMPONENTS SHALL BE FM APPROVED AND UL
- LISTED.
- E. INSTALLATION 1) ALL VALVES SHALL BE INSTALLED IN THE UPRIGHT VERTICAL OR HORIZONTAL
- POSITIONS UNLESS OTHERWISE NOTED ON THE DRAWINGS. 2) ALL VALVES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS TO FACILITATE EASY
- 3) THE HAND WHEEL OF ALL FLOOR CONTROL VALVES SHALL NOT EXCEED A HEIGHT OF 7 FT. 0 IN. ABOVE THE FINISHED FLOOR.

PIPE AND FITTINGS

- A. WET SYSTEM, FOR PIPE SIZES 1" TO 2": SCHEDULE 40 STANDARD WEIGHT BLACK STEEL PIPE, CONFORMING TO ASTM A53/A53M, ASTM A135/A135M OR ASTM A795. WELDED OR SEAMLESS, WITH STANDARD THREADED MALLEABLE IRON FITTINGS CONFORMING TO ASME B16.3 OR RIGID CUT GROOVED OR RIGID ROLLED GROOVED STANDARD WEIGHT MECHANICAL
- B. WET SYSTEM, FOR PIPE SIZES 2-1/2" AND LARGER: SCHEDULE 40 STANDARD WEIGHT BLACK STEEL PIPE, CONFORMING TO ASTM A53/A53M, ASTM A135/A135M OR ASTM A795. WELDED OR SEAMLESS, WITH RIGID CUT GROOVED OR RIGID ROLLED GROOVED STANDARD WEIGHT MECHANICAL COUPLINGS CONFORMING TO ASTM A865.
- C. THE FOLLOWING PRODUCTS ARE NOT ACCEPTABLE:
- FIT PIPING SYSTEM.
- PLAIN END PIPING SYSTEM.
- BOLTLESS COUPLINGS. HOOKER FITTINGS.
- D. ACCEPTABLE MANUFACTURERS: VIKING, VICTAULIC CO. AND TYCO FIRE

SPRINKLERS

- A. REFER TO SPRINKLER SCHEDULE ON CONTRACT DRAWINGS.
- B. INSTALLATION
- 1) COORDINATE SPRINKLER LOCATIONS WITH THE CEILING GRID, LIGHT FIXTURES, DIFFUSERS, AUDIO EQUIPMENT AND ALL OTHER COMPONENTS OF THE REFLECTED
- 2) INSTALL SPRINKLERS IN THE CENTER OF CEILING TILES AND IN A TRUE AXIS LINE IN BOTH DIRECTIONS WITH A MAXIMUM DEVIATION OF 1/2 IN. PLUS OR MINUS FROM THE AXIS LINE AS ESTABLISHED BY THE ARCHITECT FOR LISE OF ALL TRADES. AT THE COMPLETION OF THE INSTALLATION, REMOVE AND REINSTALL ANY SPRINKLERS FOUND D EXCEED THE ABOVE-MENTIONED TOLERANCE. INSTALL FLUSH PLATE SPRINKLERS WITHIN MANUFACTURER'S TOLERANCES. PRIOR TO INSTALLATION OF FLUSH PLATES, NOTIFY ARCHITECT AND CONSULTING ENGINEER FOR VERIFICATION OF INSTALLATION. ANY SPRINKLERS FOUND OUT OF TOLERANCE SHALL BE REMOVED AND REINSTALLED.

PIPING SUPPORTS

- A. SUPPORT ALL PIPING FROM BUILDING CONSTRUCTION BY PROVIDING INSERTS, BEAM CLAMPS, STEEL FISHPLATES (IN CONCRETE FILL ONLY), AND ACCEPTABLE BRACKETS. SUBMIT ALL
- B. PROVIDE ADDITIONAL FRAMING WHERE BUILDING CONSTRUCTION IS INADEQUATE. SUBMIT FOR REVIEW.

C. SUSPENDED HORIZONTAL PIPING

- 1) SUPPORT ALL PIPING INDEPENDENTLY FROM STRUCTURE USING HEAVY IRON-HINGED YPE HANGERS, SIMILAR TO GRINNEL CLEVIS NO. 260.
- 2) PROVIDE ELECTROPLATED SOLID BAND HANGERS SIMILAR TO AUTO-GRIP, FOR TWO-IN. AND SMALLER PIPE.
- 3) PROVIDE WALL BRACKETS FOR WALL SUPPORTED PIPING, AND PROVIDE PIPE SADDLES FOR FLOOR-MOUNTED PIPING
- 4) SUSPEND PIPING FROM INSERTS, USING BEAM CLAMPS WITH RETAINING CLAMP OR LOCKNUT, STEEL FISH PLATES, CANTILEVER BRACKETS OR OTHER ACCEPTED MEANS. BEAM CLAMPS SHALL BE SIMILAR TO GRINNEL FIGURES 61, 87, 131, OR 225.
- 5) SUSPEND PIPING BY RODS WITH DOUBLE NUTS. 6) PROVIDE ADDITIONAL STEEL FRAMING AS REQUIRED AND ACCEPTED WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING HANGER RODS IN REQUIRED
- 7) MAXIMUM HANGER SPACING AS INDICATED.
- a. PIPE 1" AND SMALLER SHALL BE EVERY 8 FEET
- b. PIPE 1-1/4" AND LARGER SHALL BE EVERY 10 FEET.
- 8) VERTICAL PIPING
- a. PROVIDE EXTENSION PIPE CLAMPS BOLTED TO BARE PIPE ON EACH SIDE AND BEARING EQUALLY ON STRUCTURE OR WELDED TO BEAM.
- b. PROVIDE SPACING AS INDICATED.
- OTHER FLOOR LEVEL, AT A MAXIMUM OF 25 FEET ON CENTERS. D. EXPANSION ANCHORS

(1) THREADED PIPING AND GROOVED PIPING SHALL BE SUPPORTED AT EVERY

- 1) PROVIDE SMOOTH WALL, NON-SELF-DRILLING INTERNAL PLUG EXPANSION TYPE ANCHORS CONSTRUCTED OF AISC 12L14 STEEL AND ZINC PLATED IN ACCORDANCE
- WITH FED. SPEC. 11-A-325 TYPE 1, CLASS 3. 2) DO NOT EXCEED 1/4 OF AVERAGE VALVES FOR A SPECIFIC ANCHOR SIZE USING 2000 ${\sf PSIG}~(13,\!800~{\sf KPA})~{\sf CONCRETE}~{\sf ONLY},~{\sf FOR}~{\sf MAXIMUM}~{\sf WORKING}~{\sf LOADS}.$
- 3) PROVIDE SPACING AND INSTALL ANCHORS IN ACCORDANCE WITH THE
- MANUFACTURER'S RECOMMENDATIONS.

4) EXPANSION ANCHORS SHALL BE U.L. LISTED AND SIMILAR TO HILTI HDI.

EXCESS OF SYSTEM WORKING PRESSURE.

- A. DURING CONSTRUCTION, PROPERLY CAP ALL LINES AND EQUIPMENT NOZZLES SO AS TO
- PREVENT THE ENTRANCE OF DIRT, DEBRIS, ETC. B. EACH SYSTEM OF PIPING SHALL BE FLUSHED (FOR THE PURPOSE OF MOVING DIRT, DEBRIS. ETC., FROM THE PIPING) FOR AS LONG A TIME AS IS REQUIRED TO THOROUGHLY CLEAN THE
- A. FIRE PROTECTION SYSTEM PIPING SHALL BE TESTED HYDROSTATICALLY AT A PRESSURE OF
- 200 PSI FOR DURATION OF TWO HOURS WITHOUT A LOSS IN PRESSURE. B. DEFECTS DISCLOSED BY THE TESTS SHALL BE REPAIRED OR REPLACED TESTS SHALL BE REPEATED AS DIRECTED UNTIL ALL WORK IS PROVEN SATISFACTORY.
- AND ARCHITECT OF TEST DATE AND TIME. D. MODIFICATIONS AFFECTING 20 OR FEWER SPRINKLERS SHALL NOT REQUIRE TESTING IN

NGE AND COORDINATE TESTS WITH OWNER 48 HOURS IN ADVANCE. NOTIFY ENGINEER

New Windsor, NY 12553

New York, NY 10018

BERG + MOSS ARCHITECTS PC THE BEACON BUILDING 473 MAIN STREET No. 1 BEACON, NY 12508 T: 845 831 1318 INFO@BERGMOSS.COM

STRUCTURAL/ CIVIL ENGINEERS



MECHANICAL ENGINEERS



ISSUED FOR BID 1/03/23



SPRING VALLEY POLICE LOCKER



DRAWING NO.

FIRE PROTECTION

SPECIFICATIONS

SP-400.00 SEAL & SIGNATURE

JOB NUMBER 23025-00

ISSUE DATE:

OWG BY:

CHK BY:

CHECK