SECTION 15300 - FIRE PROTECTION

PART 1 - GENERAL

1.1 - SUMMARY

- A. THE CONTRACTOR MUST USE A LANDLORD APPROVED FIRE PROTECTION CONTRACTOR TO PERFORM ALL FIRE PROTECTION WORK. ALL COSTS MUST BE INCLUDED IN THE CONTRACTOR'S BID. FIRE PROTECTION CONTRACTOR MUST COMPLY WITH ALL SECTIONS OF THIS SPECIFICATION AND INCLUDE SAME IN BID.
- B. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, TOOLS, TRANSPORTATION AND FACILITIES NECESSARY FOR, REASONABLY IMPLIED AND INCIDENTAL TO, THE FURNISHING, INSTALLATION, COMPLETION AND TESTING OF ALL THE WORK FOR THE SPRINKLER SYSTEMS AS SHOWN ON THE DRAWINGS, CALLED FOR IN THE SPECIFICATIONS, AND AS REQUIRED BY JOB CONDITIONS, TO INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
- 1) INSTALLATION OF NEW WET SPRINKLER SYSTEM AS REQUIRED TO PROVIDE COVERAGE IN ACCORDANCE WITH EXISTING CONDITIONS, AND ALL REQUIRED CODES AND CRITERIA.
- 2) TAPS, RISERS, LATERALS, BRANCHES, VALVES, ALARMS, SPRINKLER HEADS AND ALL COMPONENTS REQUIRED FOR A COMPLETE SYSTEM.
- 3) DESIGN DRAWINGS, HYDRAULIC CALCULATIONS, SUBMITTALS AND APPROVALS.
- 4) PERMITS, FEES, AND CHARGES.
- 5) TESTS AND TEST CERTIFICATES.
- C. BEFORE STARTING WORK, THE CONTRACTOR SHALL EXAMINE THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS TO SEQUENCE, COORDINATE, AND INTEGRATE THE VARIOUS ELEMENTS OF THE FIRE PROTECTION SYSTEM, MATERIALS, AND EQUIPMENT WITH OTHER CONTRACTORS TO AVOID INTERFERENCES AND CONFRONTATIONS. CONTRACTOR SHALL USE APPROVED INDUSTRY FIRE SPRINKLER STANDARDS FOR REUSING EXISTING FIRE SPRINKLER BRANCHES AND SUBMIT CALCULATIONS TO THE G.C.'S CONSTRUCTION MANAGER UPON REQUEST OR REWORK SYSTEM TO THE G.C. CONSTRUCTION MANAGER'S SATISFACTION.
- D. RELOCATION OF EXISTING MAINS, LATERALS, BRANCHES AND RISERS TO FACILITATE STORE DESIGN CRITERIA MUST BE INCLUDED IN BID PROPOSAL. CONFIRM REQUIREMENTS WITH THE G.C. PRIOR TO BID.

1.2 - RELEVANT CODES AND CRITERIA

A. REFER TO SPECIFICATION SECTION 15000.

B. NFPA-13.

C. INSURANCE CARRIERS FOR THE MALL AND THE OWNER.

1.3 - SUBMITTALS

A. SHOP DRAWINGS

- 1) THIS FIRE PROTECTION CONTRACTOR SHALL PREPARE DETAILED SHOP DRAWINGS AND CALCULATIONS FOR THEIR WORK. SUBMIT SIX (6) COPIES TO THE G.C. FOR ARCHITECTURAL APPROVAL OF HEAD LOCATIONS AND TYPES.
- 2) THIS FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR SUBMITTING COORDINATED DRAWINGS, HYDRAULIC CALCULATIONS, HEAD TYPES AND COLORS TO ALL AUTHORITIES HAVING JURISDICTION FOR APPROVAL. NO WORK SHALL BEGIN UNTIL ALL APPROVALS HAVE BEEN RECEIVED.
- 3) A COPY OF THE LETTER OF APPROVAL FROM THE LANDLORD'S INSURANCE RATING BUREAU SHALL BE FORWARDED TO THE LANDLORD'S AGENT AND TO THE G.C.'S CONSTRUCTION MANAGER

1.4 - PROJECT SITE/CONDITIONS

A. A FIRE PROTECTION SYSTEM TAP IS NORMALLY FURNISHED BY THE LANDLORD. VERIFY IN FIELD PRIOR TO BID. SPRINKLER SPACING SHALL NOT EXCEED 130 SQ. FT. IN "SALES" AREAS AND 100 SQ. FT. IN "STOCK" AREAS. PIPE SIZING SHALL BE BASED ON NFPA ORDINARY HAZARD.

PART 2 - PRODUCTS

2.1 - MANUFACTURERS

A. SPRINKLER HEADS

- 1) FUSIBLE LINK TYPE AND STYLE AS INDICATED OR REQUIRED BY THE APPLICATION. UNLESS OTHERWISE INDICATED, PROVIDE HEADS WITH NOMINAL 1/2 INCH DISCHARGE ORIFICE FOR "ORDINARY" TEMPERATURE RANGE.
- 2) CONCEALED AUTOMATIC SPRINKLER HEAD (ALL BRANDS)
- a. RELIABLE AUTOMATIC SPRINKLER COMPANY INC., MODEL#G-1, BRONZE HEAD WITH WHITE COVER OR EQUAL
- 3) SEMI-RECESSED AUTOMATIC HEAD (BANANA REPUBLIC CLASSIC ONLY)
- a. VIKING, MODEL A1Y-06662B
- b. ESCUTCHEON: VIKING, MODEL E-2
- 4) RECESSED AUTOMATIC SPRINKLER HEAD
- a. RELIABLE AUTOMATIC SPRINKLER COMPANY INC., MODEL# G WITH BRIGHT CHROME FINISH HEAD AND WHITE ESCUTCHEON OR EQUAL

5) UPRIGHT AUTOMATIC SPRINKLER HEAD

- a. RELIABLE AUTOMATIC SPRINKLER COMPANY INC., MODEL# G WITH NATURAL BRONZE FINISH HEAD OR EQUAL.
- 6) SPRINKLER HEADS BY GLOBE, STAR, GRINNELL, VIKING OR CENTRAL SHALL BE CONSIDERED EQUAL.
- 7) SPRINKLER HEADS LOCATED IN CEILINGS OR WALLS BELOW 8'-0" ABOVE THE FINISHED FLOOR AND ABOVE STORAGE DECKS SHALL BE CONCEALED.

2.3 - EQUIPMENT

A. PIPIN

- 1) PIPING SHALL BE BLACK STEEL, PER NFPA 13 REQUIREMENTS. THREADABLE, THIN WALL PIPING WILL NOT BE ALLOWED. CPVC MAY BE USED FOR UNDERGROUND ONLY.
- 2) FITTINGS SHALL BE 125 PSI SCREWED CAST OR MALLEABLE IRON FOR ALL THREADED PIPING.
- 3) FITTINGS SHALL BE VICTAULIC FIRELOCK® OR ANVIL GRUVLOK FIRE PROTECTION PRODUCTS FOR ALL GROOVED OR PLAIN END PIPING. COUPLINGS SHALL CONSIST OF TWO DUCTILE IRON HOUSINGS CONFORMING TO ASTM A536, A PRESSURE RESPONSIVE ELASTOMER GASKET, AND ZINK ELECTROPLATED CARBON STEEL BOLTS AND NUTS. RIGID TYPE, OR FLEXIBLE TYPE WHERE NECESSARY.
- a. RIGID TYPE: HOUSINGS SHALL BE CAST WITH OFFSETTING, ANGLE—PATTERN BOLT PADS TO PROVIDE SYSTEM RIGIDITY AND SUPPORT AND HANGING IN ACCORDANCE WITH NFPA 13. TONGUE AND RECESS RIGID TYPE COUPLINGS SHALL ONLY BE PERMITTED IF THE CONTRACTOR USES A TORQUE WRENCH FOR INSTALLATION. REQUIRED TORQUE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR SHALL REMOVE AND REPLACE ANY IMPROPERLY INSTALLED JOINTS. 11/4" AND LARGER: STANDARD RIGID JOINT EQUAL TO

VICTAULIC FIRELOCK® STYLE 005 OR STYLE 07 ZERO-FLEX®, OR EQUAL.

- b. FLEXIBLE TYPE: USE IN SEISMIC AREAS WHERE REQUIRED BY NFPA 13, VICTAULIC STYLE 75 OR 77, OR EQUAL.
- 4) ALARM VALVES OR DRY PIPE VALVES SHALL BE INSTALLED IN SYSTEM RISERS PER LOCAL WATER PURVEYOR REQUIREMENTS.
- a. ALARM CHECK VALVE: BLACK ENAMEL COATED DUCTILE IRON BODY, ALUMINUM BRONZE CLAPPER, STAINLESS STEEL SPRING AND SHAFT, BRASS SEAT, EPDM SEAL, AND NITRILE SEAT O-RINGS WITH GROOVED END CONNECTIONS AND WATERFLOW DETECTORS. VALVE INTERNAL PARTS SHALL BE REPLACEABLE WITHOUT REMOVING THE VALVE FROM THE INSTALLED POSITION. VICTAULIC FIRELOCK® SERIES 751.
- b. DRY PIPE VALVE: LOW DIFFERENTIAL, LATCHED CLAPPER DESIGN, BLACK ENAMEL COATED DUCTILE IRON BODY, ALUMINUM BRONZE CLAPPER, STAINLESS STEEL SPRING AND SHAFT, BRASS SEAT, EPDM DIAPHRAGM AND SEAL, WITH NITRILE SEAT O-RINGS. VALVE INTERNAL PARTS SHALL BE REPLACEABLE WITHOUT REMOVING THE VALVE FROM THE INSTALLED POSITION AND BE EXTERNALLY RESETTABLE. VALVE SHALL BE PRE-TRIMMED WITH SHUT-OFF VALVE, 3-WAY BALL VALVE, AND ACTUATOR. REQUIRED AIR PRESSURE IS 13 PSI WITH A MAXIMUM WATER PRESSURE RATING OF 300 PSI. VALVE SHALL HAVE GROOVED ENDS FOR VERTICAL INSTALLATION ONLY.
- 5) BUTTERFLY CONTROL VALVES WITH SUPERVISORY TAMPER DEVICES SHALL BE INSTALLED FOR SYSTEM CONTROL.
- 6) ALL MATERIALS AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF UNDERWRITER LABORATORIES (UL) OR FACTORY MUTUAL GLOBAL (FMG), AND SHALL BE SO STAMPED.
- 7) PRESSURE SWITCHES (WATER FLOW DEVICE) SHALL BE INSTALLED IN EACH SYSTEM RISER (DRY PIPE SYSTEMS).
- 8) FLOW SWITCHES (WATER FLOW DEVICE) SHALL BE INSTALLED IN EACH SYSTEM RISER (WET PIPE SYSTEMS).
- 9) ALARM BELL SHALL BE 10-INCH OUTDOOR ELECTRIC BELL. FURNISH FOR INSTALLATION BY THE ELECTRICAL CONTRACTOR.
- 10) SWAY BRACING, BOTH LATERAL AND LONGITUDINAL, SHALL BE REQUIRED AND SHALL BE INSTALLED PER APPLICABLE NFPA STANDARDS.
- 11) FIRE DEPARTMENT CONNECTION SHALL BE PROVIDED FOR EACH SYSTEM RISER OR MANIFOLD ASSEMBLY. INSTALL A 90 DEGREE ELBOW WITH DRAIN CONNECTION AT EACH FIRE DEPARTMENT CONNECTION TO ALLOW FOR SYSTEM DRAINAGE TO PREVENT FREEZING.
- 12) PROVIDE 6 EXTRA SPRINKLER HEADS MOUNTED TOGETHER IN A SUITABLE CABINET. INCLUDE SPARES OF ALL TYPES OF SPRINKLERS INSTALLED IN THE BUILDING.
- 13) HANGERS, DRAINS, AND INSPECTORS TEST CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE NFPA STANDARDS.
- 14) TEST AND DRAIN VALVE: GLOBE DESIGN VALVE PROVIDING TEST PORT WITH ½"
 INTEGRAL ORIFICE AND DRAIN PORT IN ONE UNIT. BRONZE BODY WITH BRONZE AND
 COPPER ALLOY INTERNALS, POLYCARBONATE SIGHT GLASSES, NITRILE O-RINGS AND EPDM
 VALVE SEATS.
- 15) BACK FLOW PREVENTION AS REQUIRED BY THE STATE AND LOCAL FIRE MARSHALL.
- 16) POST INDICATOR VALVES AS REQUIRED BY THE STATE AND LOCAL FIRE MARSHALL.

PART 3 - EXECUTION

- A. FURNISH AND INSTALL A VALVED TEST CONNECTION IN AN ACCESSIBLE LOCATION FOR THE SPRINKLER SYSTEM AS REQUIRED OR REQUESTED BY THE MALL, LOCAL INSPECTOR, OR INSURANCE CARRIER. COORDINATE LOCATION WITH THE G.C.'S CONSTRUCTION MANAGER AND LOCAL FIRE PROTECTION OFFICIAL PRIOR TO ROUGH—IN.
- 3.2 INSTALLATION

3.1 - PREPARATION

- A. WHERE POSSIBLE, REWORK THE EXISTING SPRINKLER SYSTEM TO MEET THE NEW REQUIREMENTS OF THIS DESIGN. RELOCATE ALL MAINS AND BRANCHES INTERFERING WITH CEILING HEIGHTS, LIGHT FIXTURE PLACEMENT, DUCTWORK, EQUIPMENT, AND MAJOR COMPONENTS INCLUSIVE OF ADJACENT TENANTS AND MALL COMMON AREAS. REMOVE ALL UNUSED PIPING.
- B. ALL SPRINKLER LINES SHALL BE INSTALLED AS HIGH AS POSSIBLE, AVOIDING INTERFERENCE WITH LIGHT FIXTURES, DUCTS, PIPES, STORAGE DECK, ETC. FIRE PROTECTION CONTRACTOR SHALL PREPARE COORDINATED SHOP DRAWINGS INDICATING THE LOCATIONS OF ALL SPRINKLER HEADS, SPRINKLER LINES, LIGHT FIXTURES, DUCTWORK, DIFFUSERS, GRILLES AND REGISTERS PRIOR TO INSTALLATION.
- C. FURNISH AND INSTALL 10 LB. TYPE "ABC" FIRE EXTINGUISHERS, WITH CABINETS IF REQUIRED, AND AT LEAST A "2A10BC" RATING. LOCATIONS SHALL BE ESTABLISHED IN THE FIELD BY THE G.C.'S CONSTRUCTION MANAGER AND THE LOCAL FIRE PROTECTION OFFICIAL. MAXIMUM TRAVEL DISTANCE BETWEEN EXTINGUISHERS SHALL BE 75 FEET OR LESS AS REQUIRED BY LOCAL CODES.
- 3.3 FIELD QUALITY CONTROL
- A. WHEN COMPLETED, THE ENTIRE FIRE PROTECTION PIPING SYSTEM SHALL BE HYDROSTATICALLY TESTED AS REQUIRED BY THE RULES AND REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION. SYSTEM SHALL SHOW NO SIGNS OF LEAKAGE OR OTHER DEFECTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO THE WORK OF THE OTHER CONTRACTORS OR TO THE BUILDING, OR TO ITS CONTENTS, PEOPLE, ETC., CAUSED BY LEAKS IN ANY OF THE EQUIPMENT INSTALLED BY HIM. ALL REPAIRS OR REPLACEMENT OF DAMAGES SHALL BE AT THE CONTRACTOR'S EXPENSE.
- B. PROPERLY COMPLETED AND SIGNED "SPRINKLER CONTRACTOR'S MATERIAL AND TEST CERTIFICATES" SHALL BE FURNISHED TO THE LANDLORD, AUTHORITIES HAVING JURISDICTION, AND THE G.C.'S CONSTRUCTION MANAGER.

END OF SECTION 15300

NEW STORE

SATHLETA

GAP INC.
STORE DEVELOPMENT
2 FOLSOM STREET

SAN FRANCISCO, CA 94105

40261

ON PARK

STORE LOCATION:
STAR LOCATION:
STACE C-120

DESIGN TYPE: DERBY B
GENERATION: 21Q34
PROTOTYPE DATE: 1/8/2021
OPENING: 2021



ARCHITECT INFO:

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UT. CORPORATE NUMBER: 4977264-0143 09/30/21

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