

21 05 00 FIRE PROTECTION GENERAL PROVISIONS

- PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL A FIRE PROTECTION SYSTEM, COMPLETE AS INDICATED ON THE DRAWINGS AND AS REQUIRED BY CODE AND AS SPECIFIED HEREIN.
- B. THE ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED IS TO PROVIDE POWER WIRING FOR EACH ITEM OF ELECTRICAL EQUIPMENT AND MAKE FINAL CONNECTIONS TO MOTORS.
- C. ALL FINISH PAINTING IS TO BE PERFORMED BY THE GENERAL CONTRACTOR, EXCEPT AS NOTED ELSEMHERE. GENERAL CONTRACTOR, AT THIS CONTRACTOR'S EXPENSE, SHALL RESTORE TO ORIGINAL CONDITION ANY PAINTING DEFACED DURING CONSTRUCTION AND AFTER ORIGINAL PAINTING.
- D. ALL WORK SHALL CONFORM TO CODES, RULES, AND REGULATIONS:
- NATIONAL ELECTRICAL CODE.

 STANDARD FOR INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS, NFPA 90A.
 CODE FOR SAFETY TO LIFE FROM FIRE IN BUILDINGS AND STRUCTURES, NFPA 101.
 FEDERAL OCCUPATIONAL SAFETY AND HEALTH STANDARDS.
 STATE MECHANICAL CODE.

- STATE MECHANICAL CODE.
 STATE BUILDING CODE
 STATE INDUSTRIAL COMMISSION REQUIREMENTS.
 LOCAL BUILDING CODE REQUIREMENTS.
 BUILDING INSURING AGENCY REQUIREMENTS.
 STATE PLUMBING CODE.
 NFPA.

- E. ALL PERMITS REQUIRED BY LAWS, ORDINANCES AND BUILDING CODES HAVING JURISDICTION SHALL BE OBTAINED AT THE PROPER TIME BY AND AT THE EXPENSE OF THIS CONTRACTOR.
- F. THIS CONTRACTOR SHALL OBTAIN ALL INSPECTIONS REQUIRED BY ALL LAWS, ORDINANCES AND PUBLIC AUTHORITY HAVING JURISDICTION AND SHALL OBTAIN CERTIFICATES OF SUCH INSPECTIONS AND SUBMIT SAME TO THE ARCHITECT AND SHALL PAY ALL FEES, CHARGES, ASSESSMENTS AND OTHER EXPENSES IN CONNECTION THEREWITH.
- THE MATERIALS AND EQUIPMENT INSTALLED IN THE WORK SHALL MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND NO MATERIALS OR EQUIPMENT SHALL BE ORDERED UNTIL REVIEWED BY THE ENGINEER, LANDLORD AND/OR ARCHITECT.
- H. CATALOG DATA FOR EQUIPMENT REVIEWED BY THE ARCHITECT SHALL NOT SUPERSEDE THE ENGINEER'S CONTRACT DOCUMENTS. THE REVIEW OF THE ENGINEER SHALL NOT RELIEVE THE GENERAL CONTRACTOR FROM RESPONSIBILITY FOR DEVIATIONS FROM DEAMINGS OR SPECIFIC PROVIDING PROPER CLEARANCE, FABRICATION PROCESS AND COORDINATION WITH OTHER TRA
- PROVIDE INSTRUCTION TO LANDLORD'S OPERATING PERSONNEL AS NECESSARY, SHOWING LOCATIONS AND PROPER OPERATION OF MAJOR ITEMS OF EQUIPMENT AND SYSTEM COMPONENTS AND REFERMING TO THE OPERATING INSTRUCTION MANUAL DESCRIBED BELOW AS A GUIDE. WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE, RECORD DRAWINGS INSTALLATION SHALL BE PROVIDED TO THE BUILDING LANDLORD. RECORD DRAWINGS AS A MINIMUM THE LOCATION AND PERFORMANCE DATA ON EACH PIECE OF EQUIP
- K. ANY REFERENCE TO TENANT OR TENANT'S CONSTRUCTION MANAGER OR FUR ABOVE REFERS TO UNTUCKIT. BY ANY OF
- L. REFER TO RESPONSIBILITY SCHEDULE ON SHEET GI.2 FOR INFORMATION IN REC RESPONSIBILITY OF WORK OR ITEMS WHICH MAY AFFECT BID.
- FIRE PROTECTION CONTRACTOR SHALL BE RESI EXISTING WORK, FIELD VERIFY AND COORDINAT LEFT INTACT AND PROTECT EQUIPMENT TO RE

N. WARRANTY AND GUARANTEE

FIRE PROTECTION CONTRAC

- AND FURNISH ALL MATERIALS, LABOR, TOOLS, IDENTALS AND APPURTENANCES WHICH ARE REQUIRED TO IN WORKING ORDER ALL ITEMS OF WORK CALLED FOR IG DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR CONNECTIN ALARM SYSTEM. COORDINATE WITH LANDLORD'S APPROVED FIRE ALARM
- 15 OF WORK NECESSARY TO PROVIDE A COMPLETE AND FULLY OPERATIVE
- TOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT HAZARD CLASSIFICATION, THE GUANTITY, SPACING, AND PROTECTED AREA LIMITATION OF SPRINKLER HEADS SHALL FURTHER BE RESPONSIBLE FOR COMFIRMING HIS DETERMINATION WITH THE INSURING AGENCY AND THE LOCAL FIRE AUTHORITY HAVING JURISDICTION OVER THE
- WHERE APPLICABLE, LOCATE SPRINKLER HEADS IN CENTER OF CEILING TILE, USE ARMOVER ON ALL SPRINKLER BRANCH LINES TO ACCOMPLISH EXACT LOCATION OF HEAD.
- E. PROVIDE AN NFPA-13 APPROVED AUTOMATIC FIRE SPRINKLER SYSTEM IN BUILDING, SYSTEM SHALL BE APPROVED BY THE LOCAL AND STATE FIRE MARSHAL'S OFFICE.
- F. THE INSTALLING CONTRACTOR SHALL BE LICENSED AND CERTIFIED IN THE INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS IN THIS STATE.
- G. THIS CONTRACTOR SHALL OBTAIN AND PAY FOR ANY INSPECTION FEES, CHARGES, AND ANY OTHER GOVERNMENTAL FEES APPLICABLE.
- H. THIS CONTRACTOR SHALL FILE ALL NECESSARY DRAWINGS, SPECIFICATIONS, CONTRACTOR'S MATERIAL AND TEST CERTIFICATES.
- 1. THIS CONTRACTOR SHALL OBTAIN A CERTIFICATE OF INSPECTION AND APPROVAL AND SUBMIT TO THE ARCHITECT PRIOR TO THE REQUEST FOR FINAL PAYMENT.
- J, THIS CONTRACTOR SHALL PROVIDE ALL PRODUCTS AND LABOR REQUIRED TO COMPLETE THE INSTALLATION OF ALL FIRE PROTECTION SPRINKLER SYSTEMS.
- K. FIRE PROTECTION PIPING AND EQUIPMENT LAYOUT SHALL BE COORDINATED WITH ALL EQUIPMENT, BOTH KNOWN AND UNKNOWN, AND EQUIPMENT INCLUDED UNDER OTHER DIVISIONS OF THE SPECIFICATIONS.
- L. ALL FIRE PROTECTION PIPING SHALL BE INSTALLED AS CONCEALED WORK, WHERE APPLICABLE.
- M. THE ARCHITECT RESERVES THE RIGHT TO CHANGE THE LOCATION OF ANY SPRINKLER HEAD DURING THE SUBMITTAL PROCESS EVEN IF THE MOVE SHOULD REQUIRE ADDITIONAL HEADS.
- N. FILL ANNULAR SPACE BETWEEN SLEEVE AND PIPE OR INSULATION ON ALL PENETRATIONS THROUGH FIRE RATED WALLS. FIRESTOPPING MATERIALS SHALL BE UL CLASSIFIED AND MEET THE REQUIREMENTS OF ASTM. THE METHOD OF INSULATION SHALL CONFORM TO UL FIRE RESISTANCE DIRECTORY.
- O. CEILING GRID SYSTEMS SHALL NOT BE USED TO SUPPORT FIRE PROTECTION ITEMS, PIPING, OR AN OTHER EQUIPMENT. EACH UTILITY AND THE CEILING GRID SYSTEM SHALL BE A SEPARATE INSTALLATION AND EACH SHALL BE INDEPENDENTLY SUPPORTED FROM THE BUILDING STRUCTURE. WHERE INTERFERENCE OCCURS, IN ORDER TO SUPPORT EQUIPMENT OR CEILING GRID SYSTEM, THE CONTRACTOR MUST INSTALL TRAPEZE TYPE HANGERS OR SUPPORTS WHICH SHALL NOT BE LOCATE WHERE THEY INTERFERE WITH ACCESS TO FIRE DAMPERS, VALVES, LIGHT FIXTURES, AND OTHER MECHANICAL OR ELECTRICAL ITEMS.
- P. INSTALL ALL SPRINKLER HEADS IN ROOMS IN AN ESTHETIC MANNER. SPRINKLER ARRANGEMENT SHALL BE PARALLEL AND PERFENDICULAR TO THE BUILDING WALLS. COORDINATE WITH ARCHITECT AND TENANT.
- G. FIRE PROTECTION CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND NOTE CONDITIONS WHICH WOULD AFFECT THE WORK, ALL DISCREPANCIES SHALL THEN BE REPORTED TO THE LANDLORGY'S TENANT COORDINATOR PRIOR TO THE BID AWARD.
- R. INSTALLATION WILL NOT BE CONSIDERED COMPLETE UNLESS AND UNTIL WRITTEN ACCEPTANCE IS RECEIVED FROM THE STATE FIRE MARSHAL AND THE LANDLORD'S INSURING AGENCY.
- 5. FIRE PROTECTION CONTRACTOR TO MAINTAIN ONE SET OF DRAWINGS ON THE JOB TO BE USED STRICTLY FOR RECORDING ANY INSTALLATION DEVIATIONS FROM THE CONTRACT DRAWINGS.
- FIRE PROTECTION CONTRACTOR SHALL REVIEW AND FOLLOW ALL LANDLORD REQUIREMENTS. THE SUBMITTING OF A BID AUTOMATICALLY IMPLIES THAT THESE REQUIREMENTS HAVE BEEN REVIEWED AND ARE IN THE BID PRICE AND INFORM LANDLORD IN ADVANCE OF ANY DOWN TIME.
- V. ALL SLEEVES AND OPENINGS THROUGH FIRE RATED WALLS AND/OR FLOORS SHALL BE FIRE SEALED WITH CALCIUM SILICATE, SILICONE "RTV" FOAM, "SM" FIRE RATED SEALANTS OR EQUAL, SO AS TO RETAIN THEIR FIRE RATING.

21 05 16 SHOP DRAWINGS

- A. CONTRACTOR SHALL SUBMIT FOR THE ARCHITECT'S AND LANDLORD REVIEW SIX (6) COMPLETE COPIES OF THE CATALOG DATA AND/OR SHOP DRAWINGS FOR THE LISTED ITEMS OF EQUIPMENT AND ALL COMPONENTS TO BE USED IN THE WORK, INCLUDING SPECIFIC PERFORMANCE DATA, MATERIAL DESCRIPTION, RATING, CAPACITY, WORKING PRESSURE, MATERIAL GAUGE OF THICKNESS, BRAND NAME, CATALOG NUMBER AND GENERAL TYPE IT HE SUBMISSION SHALL BE COMPILED BY GENERAL CONTRACTOR AND REVIEWED BY ENGINEER BEFORE ANY OF THE EQUIPMENT IS ORDERED.

 - SPRINKLERS (AS REQUIRED)
 VALVES (AS REQUIRED)
 TAMPER SMITCHES (AS REQUIRED)
 WATER FLOM SMITCHES (AS REQUIRED)
 HYDRAULIC CALCULATIONS (AS REQUIRED)
 CONNECTIONS TO LANDLORD'S FIRE ALARM SYSTEM (WHERE REQUIRED).
- WHEN SUBMITTED FOR THE ARCHITECT'S REVIEW, SHOP DRAWINGS SHALL CONTRACTOR'S CERTIFICATION THAT THEY HAVE REVIEWED, CHECKED A DRAWINGS, THAT THEY RARE IN HARMONY WITH THE REQUIRENTS OF PROVISIONS OF THE CONTRACT DOCUMENTS AND THAT THEY HAVE VER MEASUREMENTS AND SONSTRUCTION CRITERIA, MATERIALS, CATALLOG N, WE ASSURED THE AND SIMILAR DATA, FIRE PROTECTION CONTRACTOR WORK REPRESENTED BY THE SHOP DRAWINGS IS RECOMMENDED BY THE FIRE PROTECTION CONTRACTOR'S GUARANTEE WILL FULLY APPLY.
- C. ALL CONTRACTORS SUBMITTING PROPOSALS FOR THIS WORK SHALL ALL CONDITIONS THEREIN, ALL PROPOSALS SHALL TAKE INTO CONSIDE AS THEY MAY AFFECT THE WORK UNDER THIS CONSTITUTION THE SUBMIT AUTOMATICALLY IMPLIES THAT THIS EXAMINATION OF MISSIET HAS B

- TESTIN NKLER PIPING PER NFPA.
- A. THIS CONTRACTOR SHALL BE RESPONDED.

 B. TEST SPRINKLER PIPING WITH DEPORT LEAKAGE.
- PROTECTION CONTRA S SHALL SIGN CERTIFICATES, INDICATING WITNESSING BOVE GROUND PIPING.
- NY LEAKING JOINTS CLEAN, PAINT OR S APPROVAL. BEPAIR ANY DAMAGE TO THE FACILITY THAT THE LEAK MAY HAVE ACE ANY DAMAGED COVERINGS AS REQUIRED TO MEET THE
- WRITING FOR ANY SCHEDULING OF ANY TESTS OR DOWNTIME OF THE
- SUPP ANCHORS AND SEALS
- D HANGERS, BEAM CLAMPS, HANGER RODS, PIPE ATTACHMENTS, AND PIPE SLEEVES SHALI BP-58. EQUAL MANUFACTURERS TO BE SIMPLEX GRINNELL, B-LINE, OR MICHIGAN HANGERS.
- ALL HANGER ASSEMBLIES SHALL BE UL AND FM APPROVED.
- HANGER SPACING SHALL MEET NFPA-13 MINIMUM REQUIREMENTS.
- 21 05 26 INTERIOR PIPE TUBE AND FITTINGS AND SPRINKLER HEADS

- ALL SPRINKLER HEADS SHALL BE NEW, QUICK RESPONSE, U.L. LISTED, F.M. LISTED AND APPROVED AUTONATIC SPRAY TYPE AS MANUFACTURED BY STAR, RELIABLE, SIMPLEX-GRINNELL, VIKING, OR CENTRAL SPRINKLER CO.
 ALL SPRINKLER HEADS SHALL BE RATED FOR 165°F UNLESS INDICATED OTHERWISE ON DRAININGS OR REQUIRED BY LOCAL CODES.

 "SALES" AREA SPRINKLER HEADS ARE TO BE FULLY CONCEALED ADJUSTABLE SCREW TYPE WITH WHITE COVER PLATE TO MATCH CELLING.

 "NON-SALES" AREA SPRINKLER HEADS ARE TO BE FULLY CONCEALED ADJUSTABLE SCREW TYPE WITH WHITE COVER PLATE TO MATCH CELLING.

 "NON-SALES" SO CELLING SPRINKLER HEADS ARE TO BE CHROME UPRIGHT, ADJUSTABLE SCREW TYPE WITH WHITE COVER PLATE TO MATCH CELLING.

- 6. "MALL BULKHEAD" AREA SPRINKLER HEADS ARE TO BE FULLY CONCEALED ADJUSTABLE SCREW TYPE WITH WHITE COVER PLATE TO MATCH CEILING.

- SCHEDULE 40, BLACK STEEL PIPE, ASTM A-53 FOR FERROUS PIPING, WELDED AND SEAMLESS, ANSI B-36-10-70 FOR WROUGHT STEEL PIPE.
 CAST IRON OR MALLEABLE IRON SCREWED FITTINGS FOR PIPES 2 INCHES AND SMALLER.
 SCREWED OR CAST IRON FLANGED JOINTS FOR PIPES LARGER THAN 2 INCHES, AS INCHES AND SMALLER.
 SALVANIZED OR BLACK MALLEABLE IRON WITH BRASS SEAT SCREWED UNIONS FOR PIPES 2 INCHES AND SMALLER.
 INCHES AND SMALLER.
 AS MANUFACTURED BY VICTAULIC OR EQUAL ARE ACCEPTABLE, WHERE APPROVED BY CODE AND THE LANDLORD.
 HANGERS SHALL COMPLY WITH LANDLORD.

- C. SPRINKLER SPACING SHALL NOT EXCEED 130 SQ. FT. IN "SALES" AREAS AND 100 SQ. FT. IN "STOCK" AREAS. COMPLY WITH LANDLORD'S DESIGN CRITERIA. PIPE SIZING SHALL BE BASED ON NFPA ORDINARY HAZARD.
- D. ALL SPRINKLER LINES SHALL BE INSTALLED CONCEALED, AVOIDING INTERFERENCE WITH OTHER TRADES.
- E. WHERE POSSIBLE, REWORK THE EXISTING SPRINKLER SYSTEM TO MEET THE NEW REQUIREMENTS OF THIS DESIGN.
- PROVIDE AND INSTALL A VALVED TEST CONNECTION IN AN ACCESSIBLE LOCATION FOR THE SPRINKLER SYSTEM AS REQUIRED OR REQUESTED BY THE LANDLORD, LOCAL INSPECTOR, OR INSURANCE CARRIER.
- G. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE CAUSED BY LEAKS IN ANY OF THE EQUIPMENT INSTALLED. ALL REPAIRS OR REPLACEMENT OF DAMAGES SHALL BE BY THIS CONTRACTOR AT THIS CONTRACTOR'S EXPENSE.
- H. PROPERLY COMPLETED AND SIGNED "SPRINKLER CONTRACTOR'S MATERIAL AND TEST CERTIFICATES" SHALL BE FURNISHED TO THE LANDLORD, AND AUTHORITIES HAVING JURISDICTION.

21 05 30 SPRINKLER PIPING SPECIALTIES

- A. PROVIDE ALL NECESSARY DRAINS, COORDINATE THE EXACT LOCATION WITH THE ARCHITECT AND LANDLORD PRIOR TO ANY INSTALLATION.
- B. THIS CONTRACTOR IS TO BECOME INFORMED OF THE EXACT DIMENSIONS OF FINISHED WORK WHERE PIPES, DUCTS AND EQUIPMENT ARE TO BE PLACED AND WILL ARRANGE THE WORK ACCORDINGLY, ASSUMING ALL RESPONSIBILITY FOR PROPER LOCATION AND COORDINATION OF THE WORK.

(END OF FIRE PROTECTION SPECIFICATIONS)

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/ ENGINEER:

STORE NO:

ROJECT LOCATION THE STREETS AT SOLITHPOINT 6910 FAYETTEVILLE RD SPACE#: 1140

DURHAM, NC 27713 ESIGN TYPE:

REVISIONS:

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