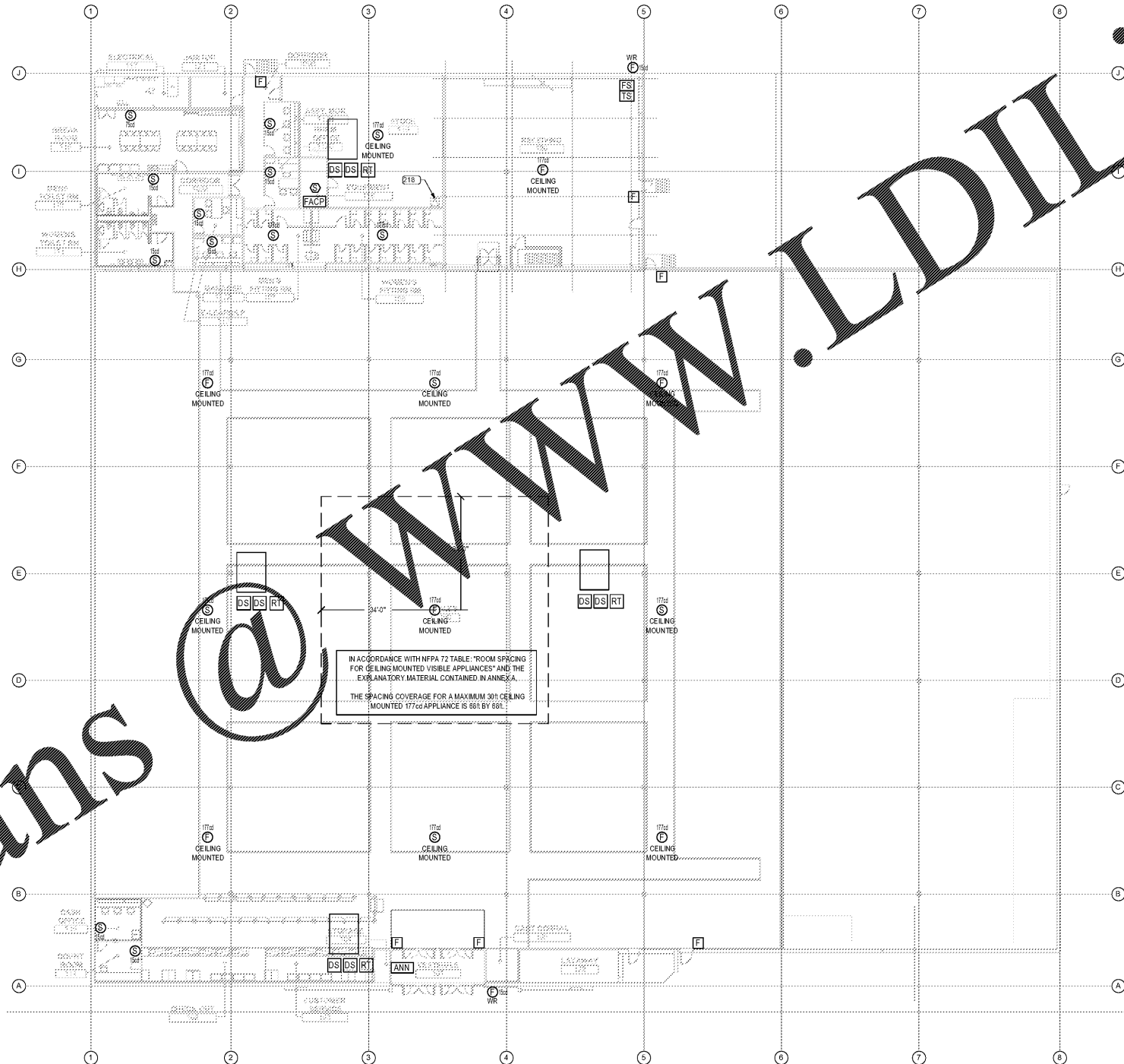


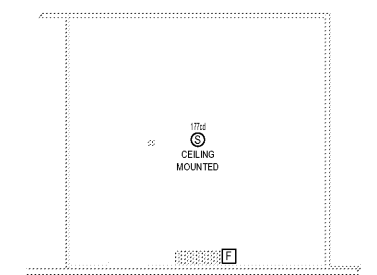
FIRE ALARM SYSTEM SPECIFICATIONS

- The System
 - Furnish and install a complete Fire Alarm System as described herein and as shown on the plans, to be wired, connected, and left in first class operating condition. Include a control panel, automatic fire detectors, notification devices, remote annunciators, all wiring, connections to devices, outlet boxes, junction boxes, and all other necessary material for a complete operating system.
 - All panels and peripheral devices shall be the standard product of a single manufacturer.
 - The equipment manufacturer shall provide all wiring diagrams, equipment shop drawings, battery calculations, etc. per State Building Code Section 507.1.1. All prepared & signed by a state certified fire alarm designer. Submit necessary quantity of materials to the authority having jurisdiction for permit.
- Requirements
 - The control panel shall receive 120 VAC power (as noted on the plans).
 - The system shall be provided with sufficient battery capacity to operate the entire system upon loss of normal 120 VAC power in a normal supervisory mode for a period of twenty-four (24) hours with 5 minutes of alarm operation at the end of this period. The system shall automatically transfer to the standby batteries upon power failure. All battery charging and recharging operations shall be automatic.
 - All circuits requiring system operating power shall be 24VDC and shall be individually fused at the control panel.
 - The panel shall be addressable type with a minimum capacity of 120 addressable points. Signal circuits shall be provided for the annunciation devices shown on plan (+2) Zamp spare circuits. Construction shall be modular w/ solid state microprocessor based electronics.
 - The control panel shall support class "B" supervised initiation circuits.
- Digital Alarm Communicator Transmitter (DACT)
 - The control panel shall be provided with a DACT unit. The DACT unit shall transmit fire alarm activity to a central supervising location as chosen by the owner. System shall be capable of seizing a telephone line and sending an alarm signal.
- Peripheral Devices
 - Supply and install where indicated on the plans fire alarm horn and ADA visual unit.
 - Audio/visual units shall provide a common enclosure for the fire alarm audible and visual alarm devices. The housing shall be designed to accommodate either horns, bells, or chimes. The unit shall be complete with pyramidal shaped lens with "fire" lettering visible from a 180° field of view. Lamp shall provide 4 wire connection to insure proper supervised in-out system connection. Unit shall be complete with all mounting hardware including back box. Audio/visual unit shall meet requirements of the American Disabilities Act for the areas served and be UL listed for its intended purpose. Strobe intensity shall be fixed to provide a minimum of 0.075 footcandles at any point in any public space. All alarm indicating devices shall be fitted with the manufacturer's red surface mounted back box for surface mounted applications. All strobes shall be synchronized and continue separately after silence, only upon reset will they discontinue.
- Addressable Device Types
 - General
 - The system control panel, over its two wire multi drop channel, must be capable of communicating with the types of addressable devices specified below. Addressable devices will be located as shown on the drawings. Panel shall be Fire-ite IMS-9000UDLS.
 - Addressable Pull Stations (Manual Fire Alarm Boxes)
 - Addressable pull stations shall communicate the station's status (alarm, normal) to the control panel over two wires which also provide power to the pull station. The address will be set on each station. The stations will be manufactured from high impact red Lexan. The station will mechanically latch upon operation and remain so until manually reset by opening with a key common to all system locks. Pull stations will be single action.
 - Smoke Detectors
 - The sensors shall be a photo type and obtain its operating power from the supervisory current in the fire alarm detection loop. The detectors microprocessor utilizes both elements & measures the signals with respect to time. Detection sensitivity shall be independent of environmental conditions. The sensitivity of the sensor shall be adjustable.
 - The duct smoke sensors shall be a photo sensor and obtain its operating power from the supervisory current in the fire alarm detection loop. Auxiliary DPDT relays shall be part of the duct housing. Activation of the relays shall be through the system program. Duct smoke sensors shall also be wired to shut down individual HVAC units upon the detection of smoke. Remote LED indicator/key test switch shall be installed where indicated on the drawings. If not indicated on the drawings, the switches shall be located on the unit when it is accessible or on a nearby corridor wall to the unit in an inaccessible location. Confirm all locations with the architect before installing if not shown on the drawings.
 - Flow and Tamper Switches
 - Flow and tamper switches shall consist of a cast aluminum pipe saddle which houses an electrical mechanical device to which is attached a corrosion free, flexible, low density, polyethylene paddle. The paddle conforms with the inside diameter of the sprinkler pipe and senses water movements. The flow switch shall incorporate an adjustable time delay mechanism between paddle operated stem and alarm initiating contacts. Flow switch shall be UL listed.
- Installation
 - Provide and install the system in accordance with the plans and specifications, all applicable codes and the manufacturer's recommendations. All wiring shall be installed in strict compliance with all the provisions of NEC - Article 760-A and C, Power Limited Fire Protective Signaling Circuits. All junction boxes and covers shall be sprayed red. Wiring color code shall be maintained throughout.
 - Installation of equipment and devices that pertain to other work in the contract shall be closely coordinated with the appropriate subcontractors.
 - The contractor shall clean all dirt and debris from the inside and the outside of the fire alarm equipment after completion of the installation.
 - The manufacturer's authorized representative shall provide on-site supervision of installation and all related programming. Descriptions for each addressable device shall be provided by the Owner at the time of programming.
 - Fire alarm wiring shall be run in a conduit system below lay-in ceiling or joists in exposed areas. Wiring and conduit shall be run parallel or perpendicular to existing ceilings, floors and walls. Open cable may be used in joist space if plenum rated and if permitted by the local AHJ.
- Testing
 - The completed fire alarm system shall be fully tested in accordance with NFPA 72H by the contractor in the presence of the owner's representative and the Local Fire Marshal. Upon completion of a successful test, the contractor shall so certify in writing to the owner.
- Warranty
 - The contractor shall warrant the completed sprinkler alarm system wiring and equipment to be free of latent mechanical and electrical defects for a period of one (1) year from the date of completion and certified test or from the date of first beneficial use.
 - The equipment manufacturer shall make available to the owner a maintenance contract which shall provide a minimum of two (2) inspections and tests per year in compliance with the NFPA guidelines.
- Quality Assurance
 - Each and all items of the Fire/Sprinkler Alarm System shall be listed as a product of a SINGLE system manufacturer under the appropriate category by Intertek Laboratories, Inc. (UL), or shall bear the "UL" label. All control equipment to be listed for UL category DQJZ as a single control unit. Particular attention shall NOT be paid to the UL listing of individual components.
 - Complete installation shall conform to applicable provisions of NFPA 72 and 72 E, NEC (NFPA-70) and Local requirements.
 - The equipment and devices supplied and installed under this specification is to be provided by a manufacturer who has a minimum of ten (10) years of experience in the design and manufacture of fire alarm equipment and has a minimum of ten (10) years of experience in the installation of fire alarm equipment within fifty (50) miles of the installation.
 - All fire alarm equipment must have a listing or approval to comply with UL 864 requirements.

1 FIRE ALARM PLAN
SCALE: 1/16" = 1'-0"



2 MEZZANINE FIRE ALARM PLAN
SCALE: 1/16" = 1'-0"



VISIBLE DEVICE POWER SUPPLY NOTE
THE FIRE ALARM INSTALLATION CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ADDITIONAL POWER SUPPLY PANELS FOR ALL HORNS AND HORNSTROBES IN THE ENTIRE BUILDING. THE ACTUAL NUMBER AND CAPACITY OF THE POWER SUPPLIES REQUIRED IS COMENSURATE WITH THE TYPE AND STYLE OF SYSTEM PROPOSED AND INSTALLED BY THIS CONTRACTOR. THIS CONTRACTOR SHALL COORDINATE AND BE RESPONSIBLE FOR ALL REQUIREMENTS FOR ADDITIONAL 120 VOLT BRANCH CIRCUITS AS NECESSARY FOR A COMPLETE FIRE ALARM CONTROL SYSTEM.

DUCT DETECTOR HVAC CONTROL
THE FIRE ALARM SYSTEM SHALL INCLUDE IN ITS DESIGN THE ABILITY TO, UPON THE ACTIVATION OF ANY INITIATING DEVICE (PULL STATION, SMOKE DETECTOR, DUCT DETECTOR), PERFORM A GLOBAL SHUT DOWN OF ALL HVAC UNITS IF THE LOCAL AHJ REQUIRES THIS FEATURE.

FIRE ALARM SYSTEM NOTES

- THIS RISER REPRESENTS A TYPICAL SYSTEM AND IS NOT INTENDED FOR INSTALLATION. SYSTEM SUPPLIER SHALL PROVIDE INSTALLATION DRAWINGS AND SCHEMATIC WIRING DIAGRAMS. EXACT SYSTEM REQUIREMENTS SHALL BE COORDINATED WITH THE SYSTEM SUPPLIER & FLOOR PLANS. THE INSTALLATION SHALL MEET NEC, NFPA & ALL APPLICABLE STATE & LOCAL CODES.
- SYSTEM SUPPLIER SHALL SUPERVISE INSTALLATION, PROGRAM AND TEST SYSTEM, AND INSTRUCT OWNER ON SYSTEM OPERATION.
- ALL FIRE ALARM WIRING SHALL BE IN 1/2" MINIMUM CONDUIT. OPEN WIRING MAY BE USED ABOVE ACCESSIBLE CEILING PROVIDED THAT IT IS PLENUM RATED.
- PROVIDE ADDITIONAL MONITOR AND CONTROL MODULES AS RECOMMENDED BY SYSTEM SUPPLIER.
- ALL CONTROL CABINETS SHALL BE IN GROUND PER N.E.C. REQUIREMENTS AND PER SPECIFICATIONS.
- REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. REFER TO DRAWINGS FOR DEVICE QUANTITY AND LOCATIONS.

FIRE ALARM NOTES

- ELECTRICAL WORK SHALL BE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND THE APPLICABLE UNIFORM FIRE ALARM CODE AND LOCAL ORDINANCES.
- ALL CONDUITS SHALL BE COPPER ALUMINUM WIRE SHALL NOT BE USED.
- ALL CIRCUITS SHALL BE MINIMUM WIRE SIZE OF #16 AWG.
- FIRE ALARM CONTROL PANEL AND DEVICE INSTALLATION SHALL COMPLY WITH ICC/ANSI 117.1 1998 AND ALL OTHER ADA CODES AND REQUIREMENTS.
- STROBE AND HORNSTROBES SHALL BE CEILING MOUNTED OR WALL MOUNTED IF WALL MOUNTED THEN STROBE AND HORNSTROBES SHALL BE MOUNTED AT 5' BELOW THE CEILING WHICHEVER IS LOWER. ALL STROBES SHALL HAVE A SYNCHRONIZED FLASH. ALL HORNSTROBES SHALL BE WHITE UNLESS THIS IS NOT ALLOWED BY THE LOCAL AHJ.
- DETECTORS SHALL NOT BE LOCATED CLOSER THAN (3) FEET FROM VENTILATION REGISTERS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO BEGINNING WORK.
- THE INTENT IS TO FURNISH A SYSTEM WHICH IS CODE COMPLIANT.
AFG - ABOVE FINISHED GRADE
UN - UNLESS OTHERWISE NOTED
ETR - EXISTING TO REMAIN

FIRE ALARM LEGEND

SYMBOL	DESCRIPTION
(S)	SMOKE DETECTOR
(S)ER	SMOKE DETECTOR-ELEVATOR RECALL
(E)102	HORN/STROBE (STROBE LIGHT INTENSITY AS INDICATED)
(E)101	STROBE ONLY (STROBE LIGHT INTENSITY AS INDICATED)
(P)	PULL STATION
(FS)	FLOW SWITCH
(TS)	TAMPER SWITCH
(DS) (RT)	DUCT-SMOKE DETECTOR / REMOTE TEST SWITCH - INSTALL IN RETURN AIR DUCT. PROVIDE ADDITIONAL DETECTOR IN SUPPLY DUCT.
(ANN)	ANNUNCIATOR - 40 CHARACTER DISPLAY FLUSH MOUNTED
(FACP)	FIRE ALARM CONTROL PANEL FIRE-LITE #MS-9000UDLS

Date: _____
William J Fearon AIA
VA 017651

Burlington
BURLINGTON STORES, INC.
1830 ROUTE 130 NORTH
BURLINGTON, NEW JERSEY
08016

TENANT IMPROVEMENT FOR
MANASSAS, VA
STORE #188
SUDLEY TOWN PLAZA
7685 SUDLEY ROAD
MANASSAS, VA 20109

DISTRIBUTION:

DATE	DATE
PERMIT SUBMISSION	02-22-2018

PROJECT INFO:
PROJECT NUMBER:
9333.10
DRAWN: PPW
CHECKED: JMD
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DRAWING NAME & TITLE:
FIRE ALARM PLANS NOTES AND DETAILS



E6.0