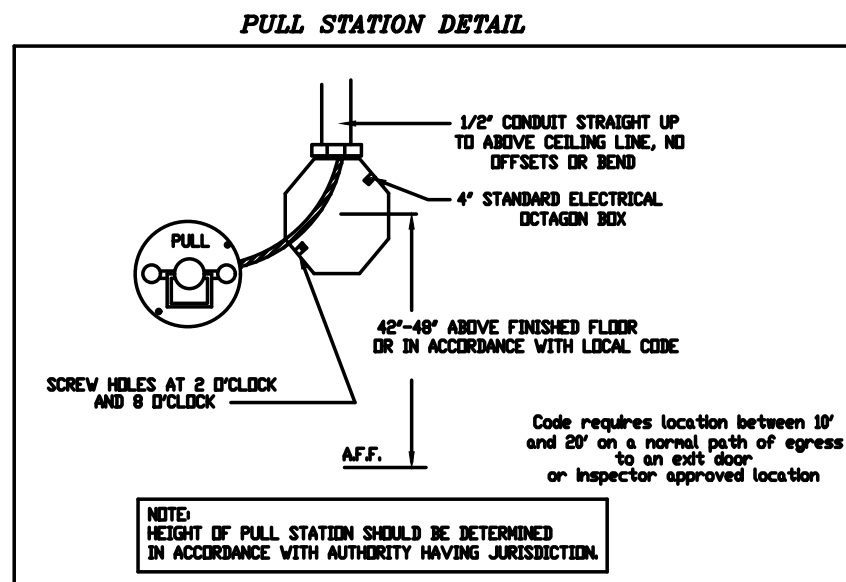


UL 300 HOOD FIRE SUPPRESSION SYSTEM TANK/CAS ELECTRIC WET CHEMICAL



The TANK / CAS-EWC Fire Suppression System has been tested and certified to the UL 1254 Standard for Fire-Engineered Chemical Extinguishing System Units and UL/ULC 300 Standard for Fire Extinguishing Systems for Protection of Commercial Cooking Equipment and is listed with Underwriters Laboratories (UL) under file number E33569.

FIRE SYSTEM OPERATION

- Kitchen hood shall be constructed and installed per NFPA 96.
- Hood Electrical Control Panel and Fire Control System shall shut down kitchen hood make up air fan upon activation of fire extinguishing system. Kitchen hood exhaust fan shall continue to operate or power on upon activation. The hood electrical panel and fire system will provide interlock for automatic operation of fire suppression system with:
 - Mechanical gas valve (installed by mechanical/plumbing contractor, if gas used)
 - Hood supply and exhaust fan (wiring by elec)
 - Remote manual pull station (by hood fire system distr)
 - Fire alarm system notification (if Bldg Fire Alarm present, by Fire alarm Contractor)
- All exposed piping with fire suppression system shall be covered with a chrome sleeve.
- Mechanical contractor shall install conduit in wall for manual pull station. Pull Station shall be located at or near a means of egress from the cooking area.
- Fire suppression system shall be in accordance with UL 300.

SEQUENCE OF OPERATIONS:
The TANK / CAS-EWC fire system is a self-contained pressurized fire suppression system. TANK / CAS-EWC is actuated when the electric firestat contacts close (at determined firestat setting and/or temperature rise-of-rate of 40°F per minute) and/or the manual activation station is pushed, an electric signal is sent to the release solenoid of the fire system. When the release solenoid is opened, it allows stored pressure from the primary tank to flow through the primary actuator kit opening a pneumatic actuator. The pneumatic actuator forces the plunger in the tank valve body to open, allowing the liquid fire suppressant to be distributed throughout the fire system piping network over the protected hazard area.

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH:

NSF

NFPA #96

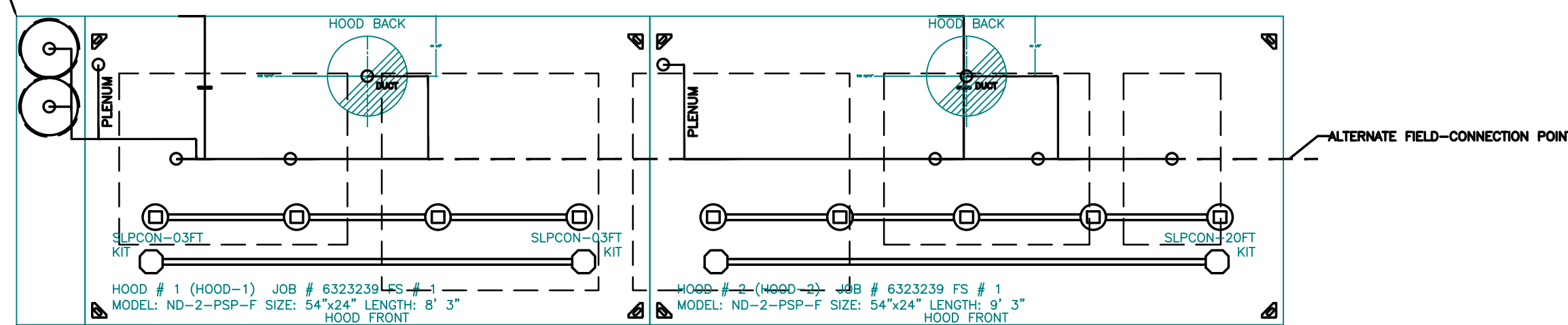
UL 710 & ULC710 STANDARDS

E.T.L. LISTED 3054804-001

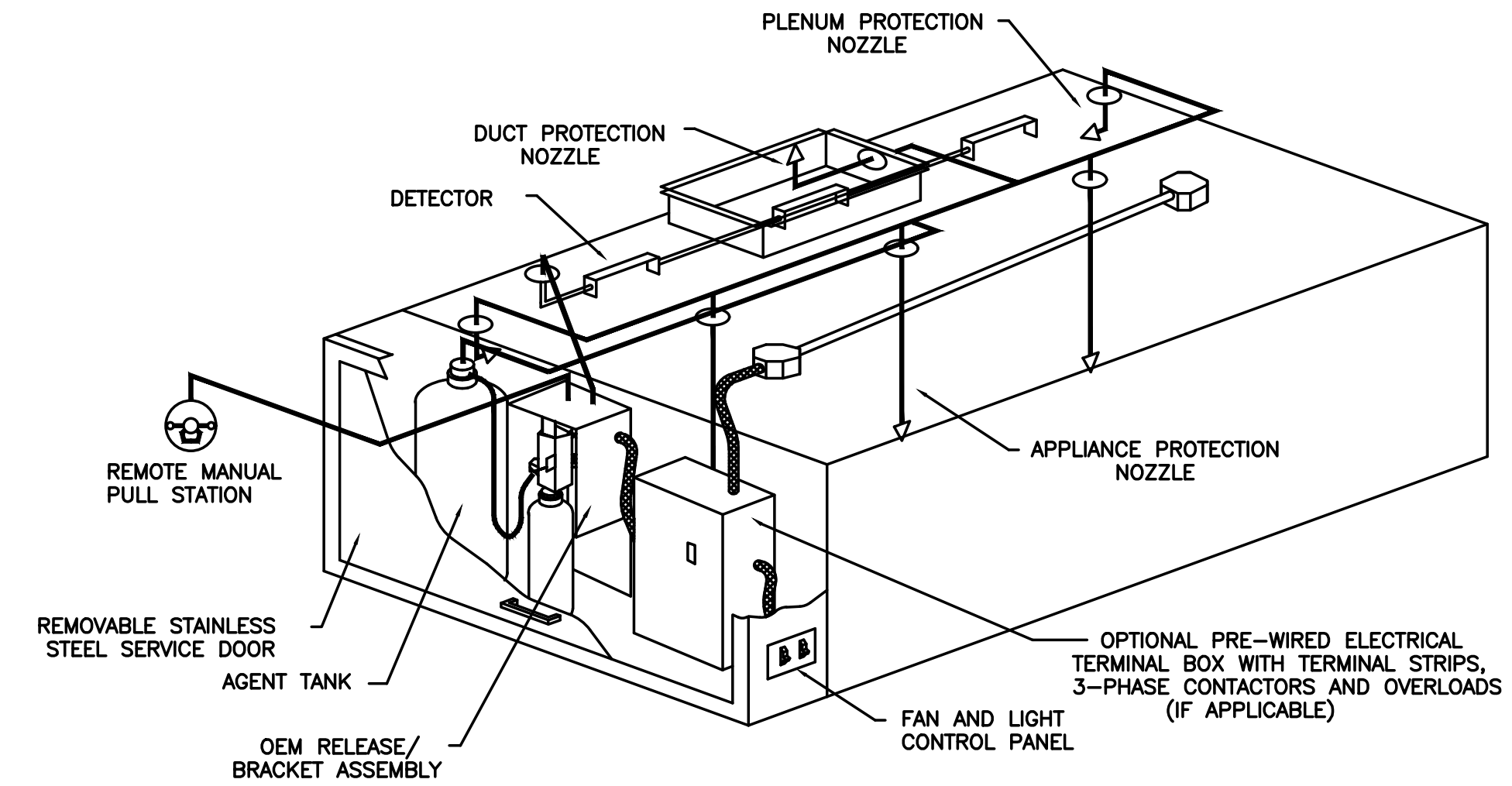
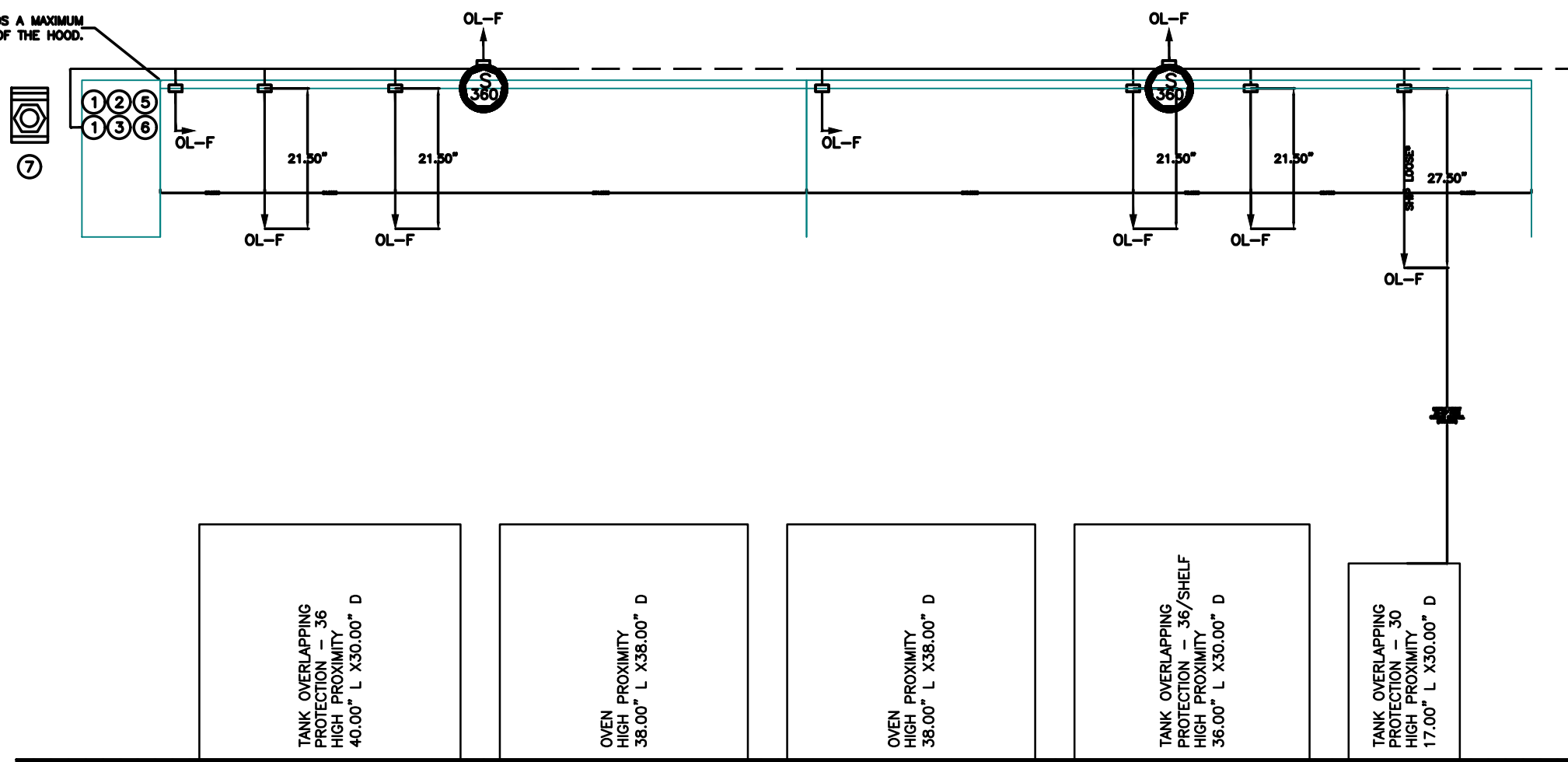
***FOR QUESTIONS*
CONTACT: REVISED 06
EASTERN NORTH CAROLINA**

PHONE: (919) 895-3008
EMAIL: REVISED@HITELINK.COM

... SYSTEM REQUIRES A MINIMUM OF 7 FT OF EXPOSURE FOR LENGTH BETWEEN TANK AND HEAVIEST APPLIANCE NOZZLE FOR MOST APPLIANCES EACH TO COVER EXPOSED AREA 12 FT OF EQUIPMENT LENGTH. SEE MANUAL FOR DETAILS



FACTORY PIPING EXTENDS A MINIMUM OF 6" ABOVE THE TOP OF THE HOOD.



TYPICAL ANSUL R-102 SYSTEM LAYOUT

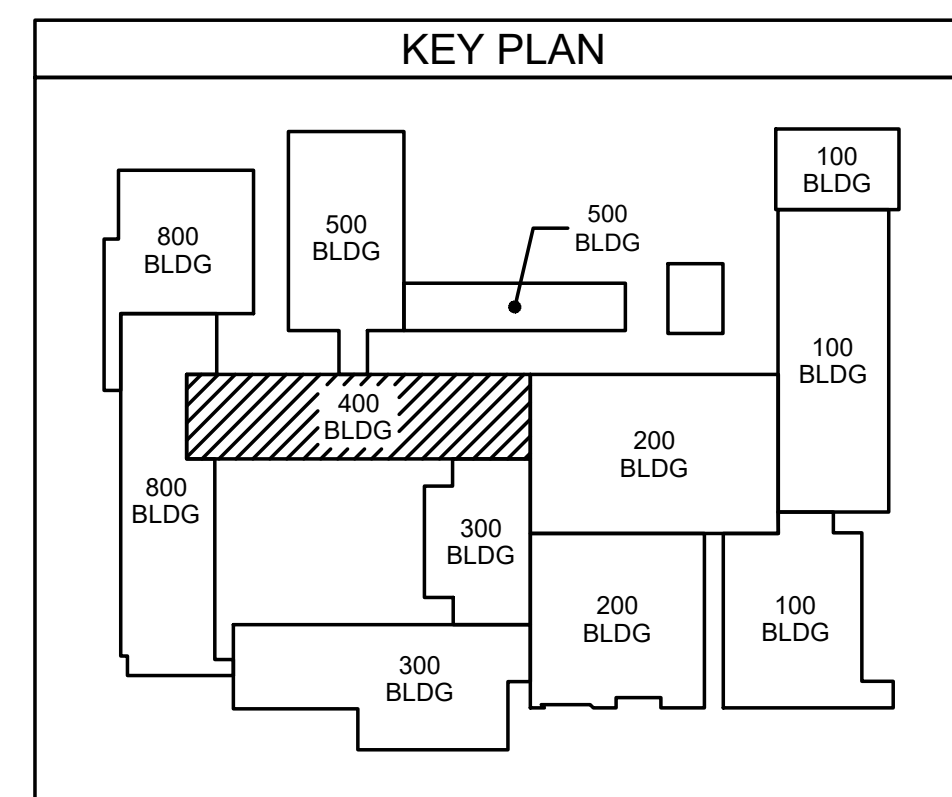
- NOTES**
- FIELD PIPE DROPS AS SHOWN
 - PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
 - FIELD INSTALLED DROP: FACTORY WILL PROVIDE CITY 2.60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
 - SHIP LOOSE DROPS: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
 - RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
 - OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION. IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
 - FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.
 - APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.
 - THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.
 - OL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS
 - JOB #: 6323239
 - JOB NAME: WEST CARTERET HIGH SCHOOL - FOOD LAB HOOD.
 - SYSTEM SIZE: TANK-SP-2 DESIGN FP: 39, MAXIMUM FP: 40.
 - HOOD # 1: 8' 3.00" LONG x 54" WIDE x 24" HIGH.
 - RISER # 1 SIZE: 1.4" DIA.
 - HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.
 - HOOD # 2: 9' 3.00" LONG x 54" WIDE x 24" HIGH.
 - RISER # 1 SIZE: 1.4" DIA.
 - HOOD # 2 METAL BLOW-OFF CAPS INCLUDED.
 - HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
 - MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

LEGEND - FIRE CABINET TANK SYSTEM

- | | |
|---|---------------------------------|
| 1 | 4 GALLON TANK. |
| 2 | PRIMARY ACTUATOR RELEASE. |
| 3 | SECONDARY ACTUATOR RELEASE. |
| 4 | PRESSURE SUPERVISION SWITCH. |
| 5 | PRIMARY HOSE ASSEMBLY. |
| 6 | SECONDARY HOSE ASSEMBLY. |
| 7 | REMOTE MANUAL ACTUATION DEVICE. |

INCLUDES: FIELD INSTALLATION AND HOOKUP DURING NORMAL BUSINESS HOURS BY CERTIFIED INSTALLERS ONLY IN THE LOCATION NOTED ABOVE. TWO SITE VISITS ONLY (ONE VISIT TO SET PULL STATION & SYSTEM HOOKUP AND ONE VISIT FOR ONE TEST; ADDITIONAL VISITS WILL RESULT IN ADDITIONAL CHARGES). ONE MECHANICAL OR ELECTRICAL GAS VALVE PER SYSTEM AT A MAXIMUM SIZE OF 2", PRESSURE SUPERVISION SWITCH, AND SYSTEM TEST.

EXCLUDES: UNION LABOR & PREVAILING WAGE (LABOR & WAGES WILL BE ADDED IF APPLICABLE), GAS VALVE INSTALLATION, ELECTRICAL HOOKUP AND CONNECTIONS, HANGING OF FIRE CABINET, SHIRT TIPS, HANDHELD EXTINGUISHER(S), ON-SITE RE-PIPING DUE TO EQUIPMENT LAYOUT CHANGES.



ES Project No: ES21080

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ENGINEERING

SOURCE OF NC, P.A.

11/21/23

Professional Engineer

11/21/23

WILSON FOU

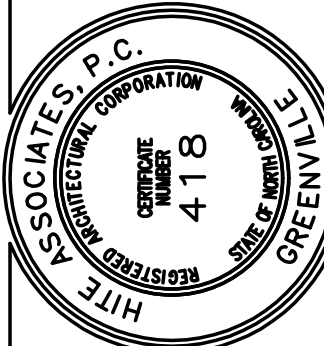
INFORMATION TAKEN FROM SIMILAR JOB BY CAPTIVE-AIRE, INCLUDED FOR REFERENCE ONLY

No.	Date	Revision
1	11/17/23	ADDENDUM # 1
2	11/17/23	ADDENDUM # 2
3	11/21/23	ADDENDUM # 3

Hite associates

ARCHITECTURE / PLANNING / TECHNOLOGY

2600 Meridian Drive / Greenville, NC 27834 / Tel: (252) 757-0333



New Additions & Renovations to
West Carteret High School
4700 Country Club Road, Morehead City, NC 28577
Carteret County Schools / North Carolina

Project No: 22112

Date: 03 Oct 2023

Drawing No: **M 405**