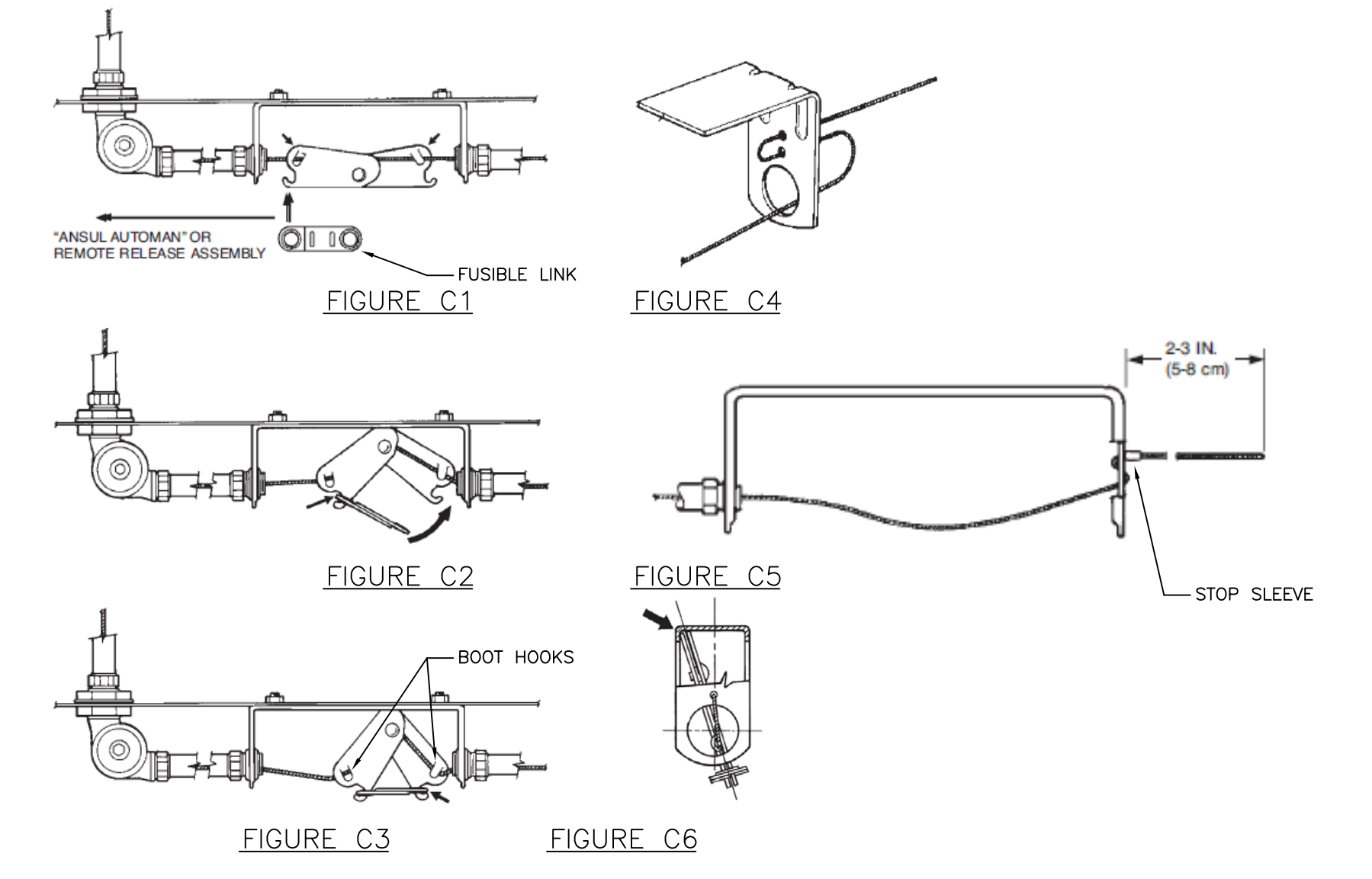


**EQUIPMENT LAYOUT - ELEVATION VIEW**  
SCALE: 1/2 INCH = 1 FOOT



**DUCT & PLENUM NOZZLE AIMING DETAIL**  
SCALE: 1/2 INCH = 1 FOOT



**SCISSOR LINKAGE DETAIL**  
SCALE: NOT TO SCALE

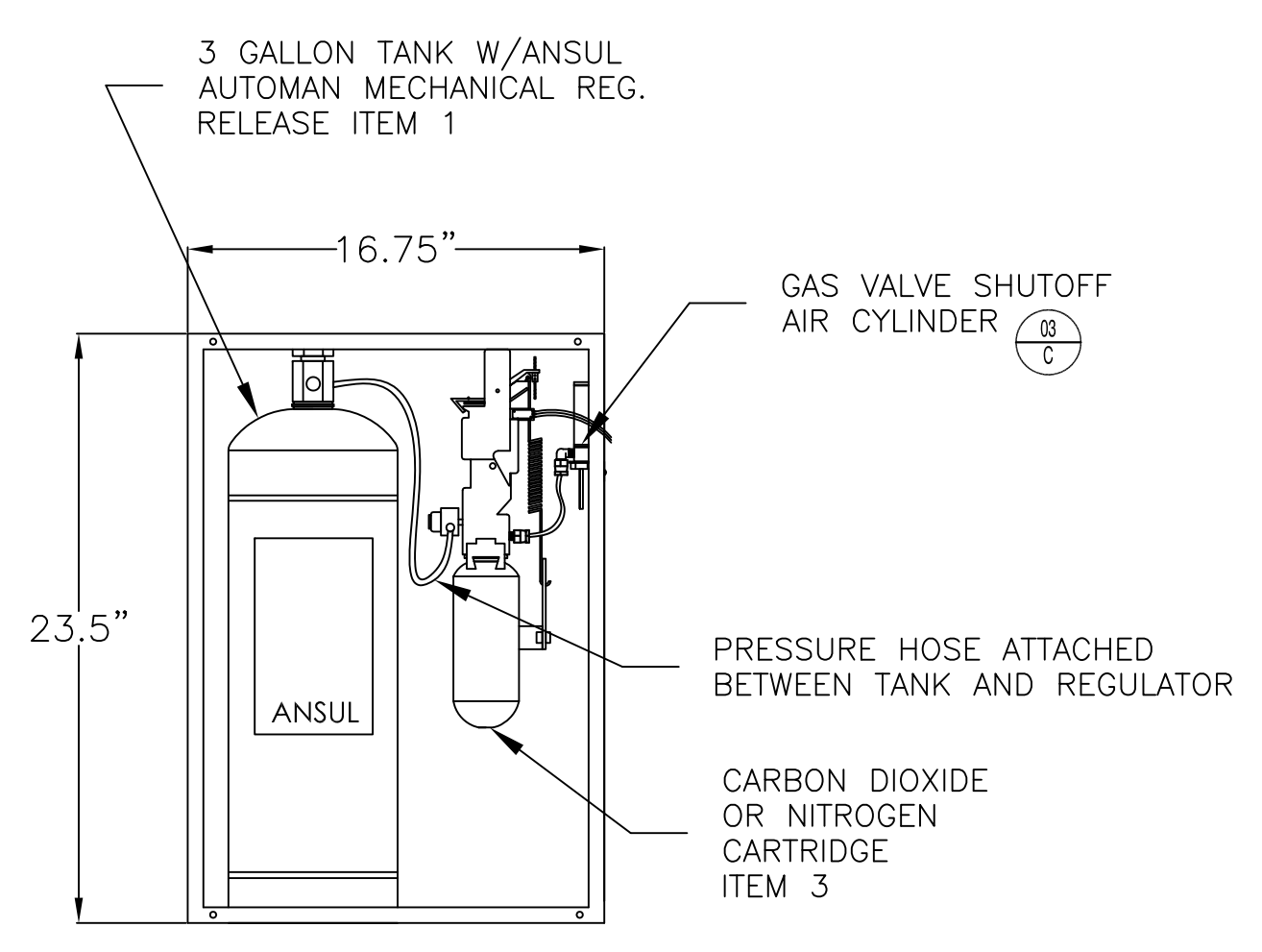
**LEGEND - ANSUL BILL OF MATERIALS**

| ITEM | QTY | PART NO. | DESCRIPTION   |
|------|-----|----------|---|
| 1    | 1   | 430299   | 3 Gallon Tank w/ANSUL AUTOMAN Mechanical Reg. Release |
| 2    | 1   | 79372    | ANSULEX Low pH Wet Chemical Agent                     |
| 3    | 1   | 428445   | Cartridge, Carbon Dioxide, 101-20                     |
| 4    | 2   | 439840   | 2W Nozzle   |
| 5    | 2   | 439838   | 1N Nozzle   |
| 6    | 2   | 439842   | 230 Nozzle  |
| 7    | 2   | 435547   | Detector, Series (Scissor Linkage)                    |
| 8    | 1   | 435546   | Detector, Terminal (Scissor Linkage)                  |
| 9    | 3   | 439088   | 360 deg F Fusible Link                                |
| 10   | 14  | 423251   | Corner Pulley, Compression                            |
| 11   | 1   | 435960   | Remote Pull Station, Red (with 50 ft. wire rope)      |
| 12   | 1   | 423879   | Alarm Initiating Switch DPDT                          |
| 13   | 1   | 55610    | Gas Valve, Mechanical, 2 in.                          |
| 14   | 4   | 77285    | Adaptor, 3/8 in. Quik-Seal                            |
| 15   | 3   | 79153    | Adaptor, 1/2 in. EMT Compression-Seal                 |
| 16   | 1   | 423253   | Adaptor, ANSUL Hood Seal                              |

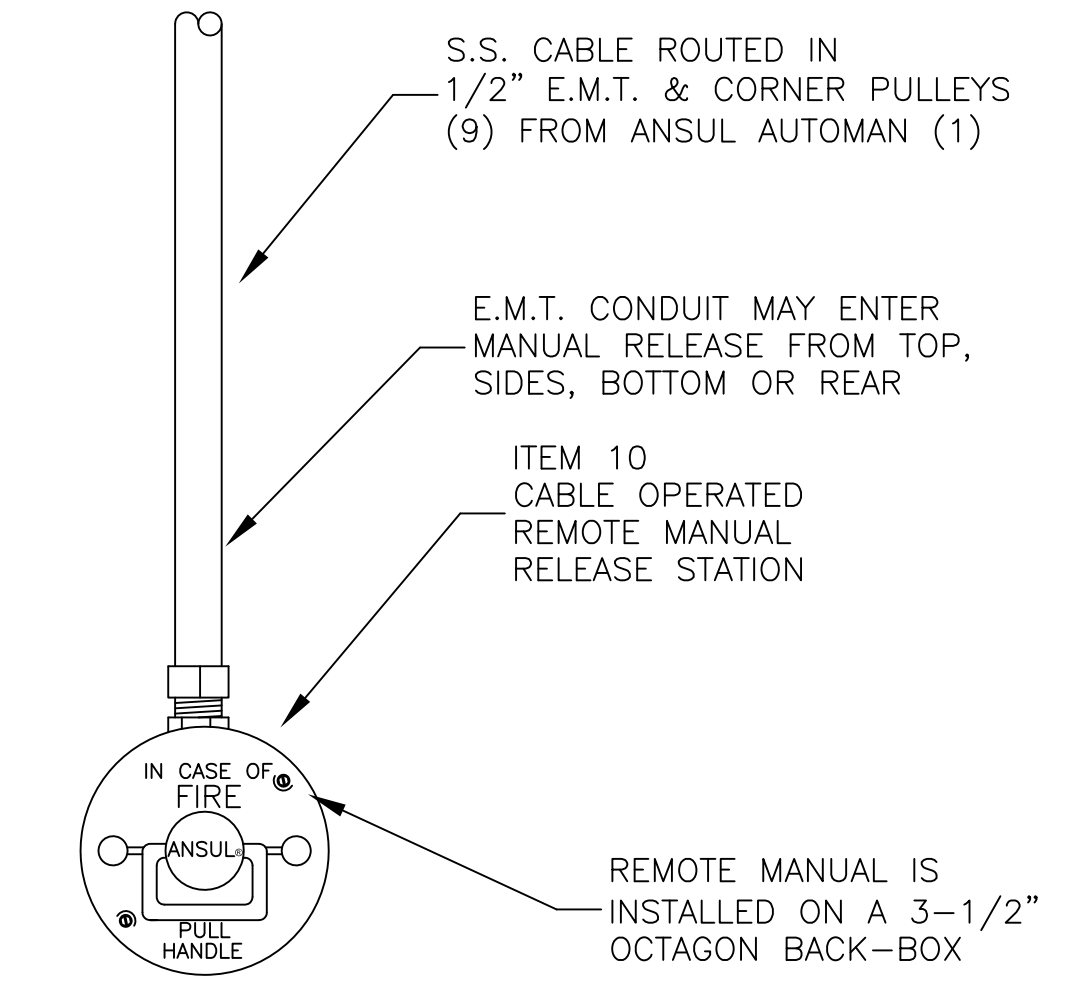
**SYSTEM DESCRIPTION & SEQUENCE OF OPERATION**

- THE SYSTEM SHALL BE AN ANSUL R102 RESTAURANT FIRE SUPPRESSION SYSTEM AS MANUFACTURED BY ANSUL, INC., 1 STANTON STREET, MARINETTE, WI 54143-2542A. THE SYSTEM SHALL BE PRE-ENGINEERED.
- THE INSTALLATION SHALL COMPLY WITH THE FOLLOWING CODES AND STANDARDS:
  - NFPA 17A, "STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS", LATEST EDITION,
  - NFPA 96, "STANDARD FOR VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS", LATEST EDITION,
  - THE EQUIPMENT MANUFACTURER'S PUBLISHED INSTRUCTIONS,
  - STATE FIRE PREVENTION CODES,
  - THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- THE SYSTEM SHALL PROVIDE FIRE PROTECTION FOR RESTAURANT COOKING APPLIANCES, EXHAUST HOODS AND CONNECTED DUCTS.
- DETECTION AND AUTOMATIC SYSTEM ACTUATION SHALL BE ACHIEVED WITH FUSIBLE LINK HEAT DETECTORS INSTALLED IN THE HOOD PLENUM AREA, OVER THE PROTECTED COOKING APPLIANCES AND ACROSS THE HOOD-DUCT OPENING.
- MANUAL RELEASE SHALL BE ACHIEVED BY A LOCAL MANUAL RELEASE CONTROL BY A CABLE OPERATED MANUAL RELEASE STATION INSTALLED NEAR AN EGRESS FROM THE AREA COOKING APPLIANCES ARE LOCATED.
- WHEN EITHER A FUSIBLE LINK SEPARATES DUE TO FIRE OR A MANUAL RELEASE IS OPERATED, THE R102 AUTOMAN SHALL CAUSE THE FOLLOWING EVENTS TO OCCUR:
  - THE R102 AUTOMAN GOES INTO THE "RELEASED" POSITION.
  - THE SYSTEM ACTUATION NITROGEN OR CARBON DIOXIDE CARTRIDGE RELEASES PRESSURIZED NITROGEN OR CARBON DIOXIDE THROUGH A HIGH PRESSURE HOSE TO A REGULATOR AND INTO THE AGENT STORAGE TANK. THE ACTUATION MEDIUM PRESSURIZES THE CONTENTS OF THE AGENT SUPPLY TANK, RELEASING THE WET CHEMICAL AGENT INTO THE DISCHARGE PIPING NETWORK TO THE DISCHARGE NOZZLES.
  - A SNAP-ACTION MICROSWITCH SHALL CHANGE STATE AND CAUSE THE PROTECTED COOKING APPLIANCES TO DE-ENERGIZE AND SHUT DOWN ALL MAKE-UP AIR TO HOOD SYSTEM, EXHAUST FANS SHALL REMAIN ON.
  - A SNAP-ACTION, TERMINAL TYPE MICROSWITCH SHALL CHANGE STATE, SENDING A SIGNAL TO THE BUILDING LIFE-SAFETY SYSTEM.

| Coverage                 | Overall Dimensions | Nozzle | Flow Points |
|--------------------------|--------------------|--------|-------------|
| Hood                     | 216 x 54 in.       | 1N     | 1           |
| Hood                     | 216 x 54 in.       | 1N     | 1           |
| Duct: Square             | 22 x 9 in.         | 2W     | 2           |
| Duct: Square             | 22 x 9 in.         | 2W     | 2           |
| BKI Fryer                | 14 x 21 in         | 230    | 2           |
| BKI Fryer                | 14 x 21 in         | 230    | 2           |
| <b>TOTAL FLOW POINTS</b> |                    |        | <b>10</b>   |



**AUTOMAN RELEASE DETAIL**  
SCALE: NOT TO SCALE



**REMOTE MANUAL RELEASE DETAIL**  
SCALE: NOT TO SCALE

**NOTES:** THE INFORMATION AND GRAPHIC DEPICTIONS ON THIS SHEET ARE DERIVED FROM INFORMATION OBTAINED IN A PUBLICATION TITLED "ANSUL DESIGN, INSTALLATION, RECHARGE AND MAINTENANCE MANUAL R-102 RESTAURANT FIRE SUPPRESSION SYSTEM (STANDARD UL 300 LISTED)" ANSUL PART NUMBER 418087-11.

IF ADDITIONAL TECHNICAL ASSISTANCE IS NEEDED CONTACT ANSUL, INC. 1 STANTON STREET, MARINETTE, WI 54143-2542 USA. TELEPHONE NUMBER: 1-715-735-7415 TECHNICAL ASSISTANCE PRESS 4.

**System Information:**

ANSUL MODEL R102 - 3G "WET"  
CHEMICAL KITCHEN FIRE SUPPRESSION SYSTEM PROTECTING AN EXHAUST HOOD AND APPLIANCES

**Client:**

BUCKLEY ASSOCIATES INC.  
HANNAFORD SUPERMARKET  
295 FOREST AVE.  
PORTLAND, ME 04101

**Interstate FIRE PROTECTION**

P.O. BOX 1005  
NORTH CONWAY, NH 03860

P.O. BOX 187  
GARDINER, ME 04345

"WET" CHEMICAL KITCHEN FIRE SUPPRESSION SYSTEM INSTALLATION PLAN

|                            |            |            |
|----------------------------|------------|------------|
| Proj. no.:                 | Revisions: | Date:      |
| CAD File: PortlandHana.dwg | II         | 08/24/2015 |
| Drawn By: M. STEWARD       |            |            |
| Created on: 08/24/2015     |            |            |
| Designed by: M. STEWARD    |            |            |
| Checked by: B. TWOMBLY     |            |            |
| Approved by: B. TWOMBLY    |            |            |
| Project Lead: J. MOONEY    |            |            |
| Scale: AS NOTED            |            |            |

**SHEET :**

01