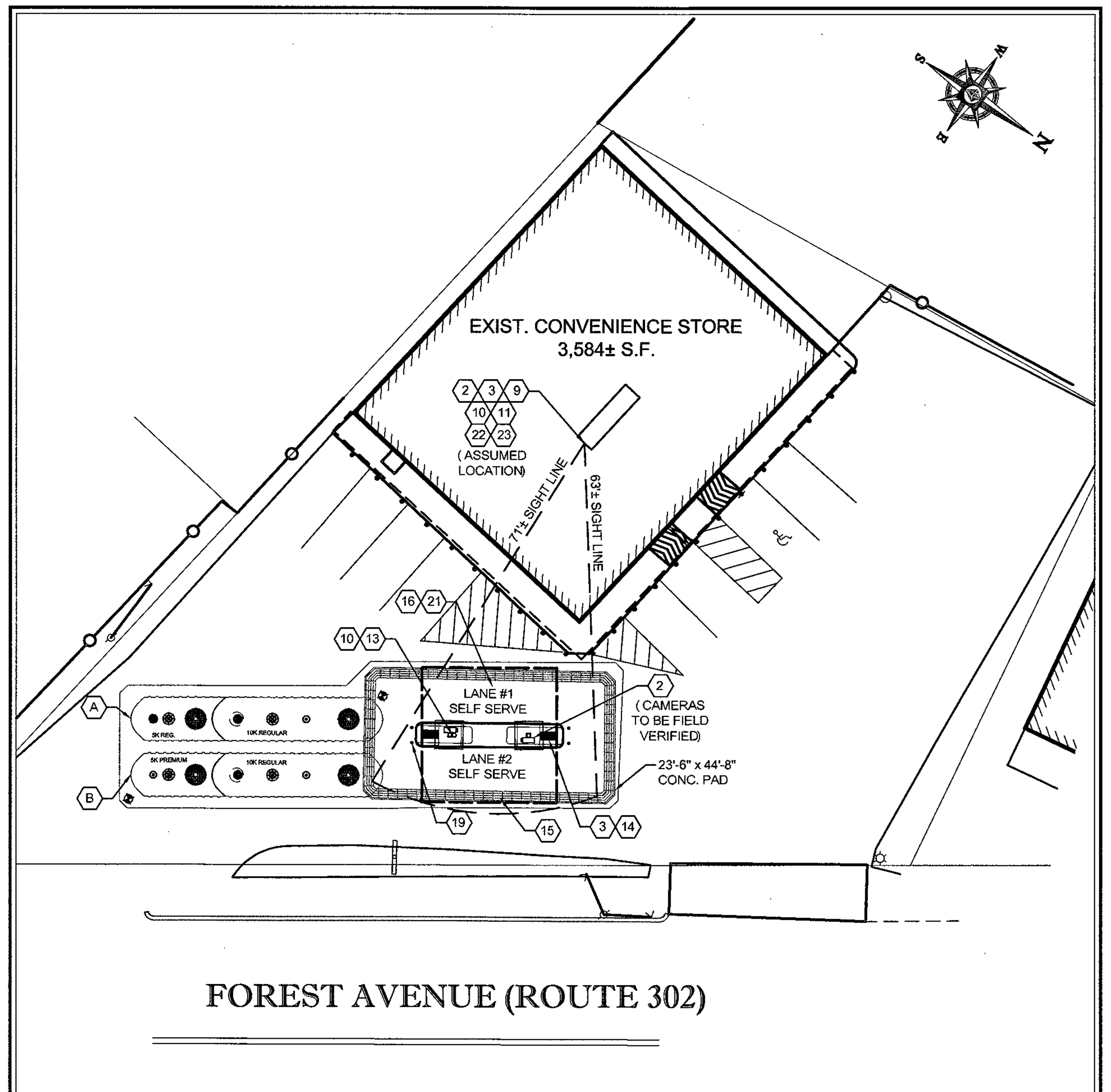
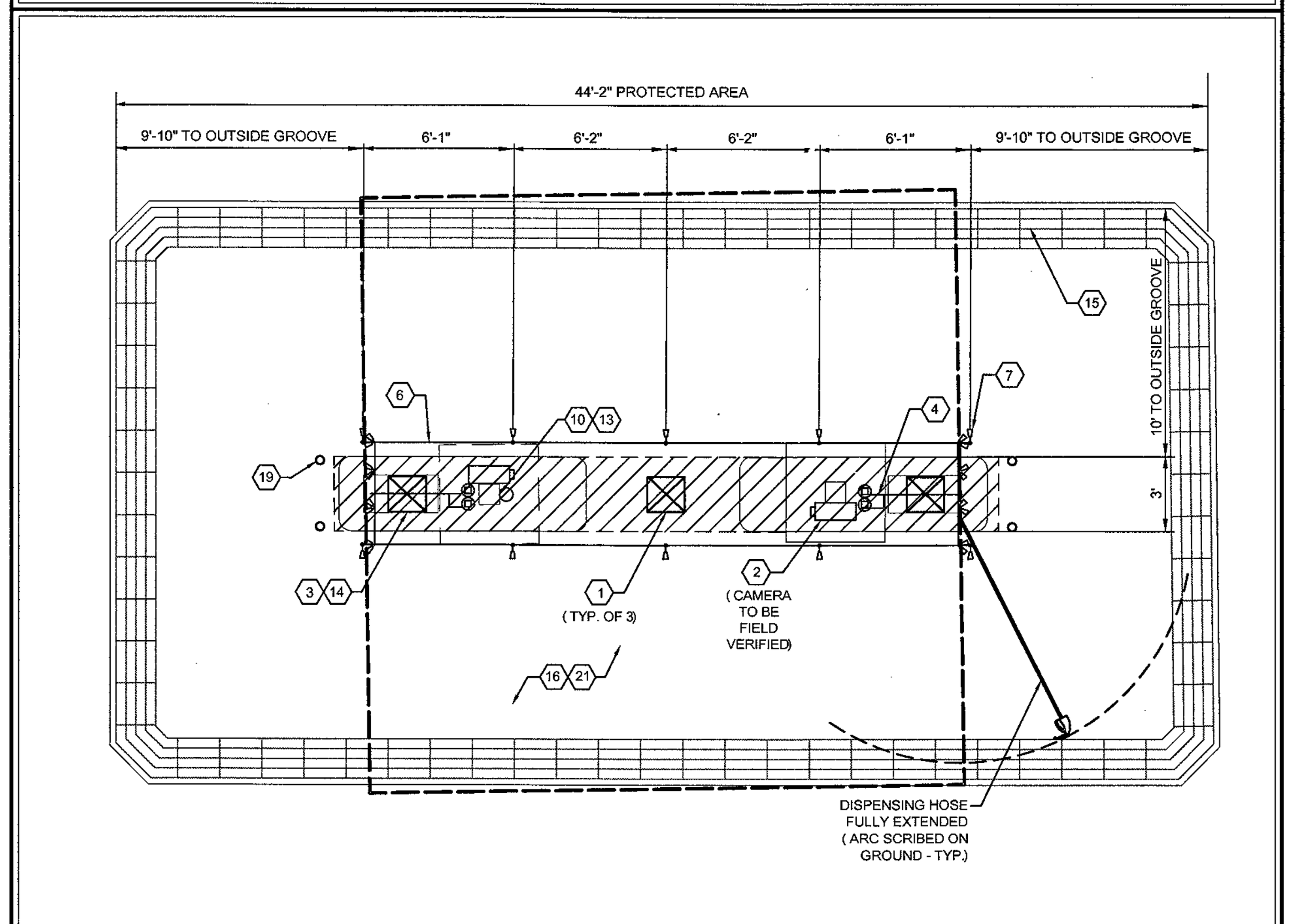


SITE PLAN

SCALE: 1" = 20'-0"



PLAN VIEW

SCALE: NONE

MISCELLANEOUS CHARTS

VEHICLE CAPACITY

TYPE	FULL SERVE	SELF SERVE
FUELING	--	4
WAITING TO BE FUELED	--	2
TOTALS	--	6
TOTAL NUMBER OF DISPENSING UNITS: (2) GASOLINE AND DIESEL		
TOTAL NUMBER OF FUELING POSITIONS: (4) GASOLINE AND DIESEL		

U/G STORAGE TANKS

TANK	CAPACITY	PRODUCT	TANK TYPE	INSTALL DATE
A SPLIT TANK	10,000 GAL 5,000 GAL	REG. GASOLINE REG. GASOLINE	DWFG DWFG	PROPOSED PROPOSED
B SPLIT TANK	10,000 GAL 5,000 GAL	REG. GASOLINE PREMIUM	DWFG DWFG	PROPOSED PROPOSED

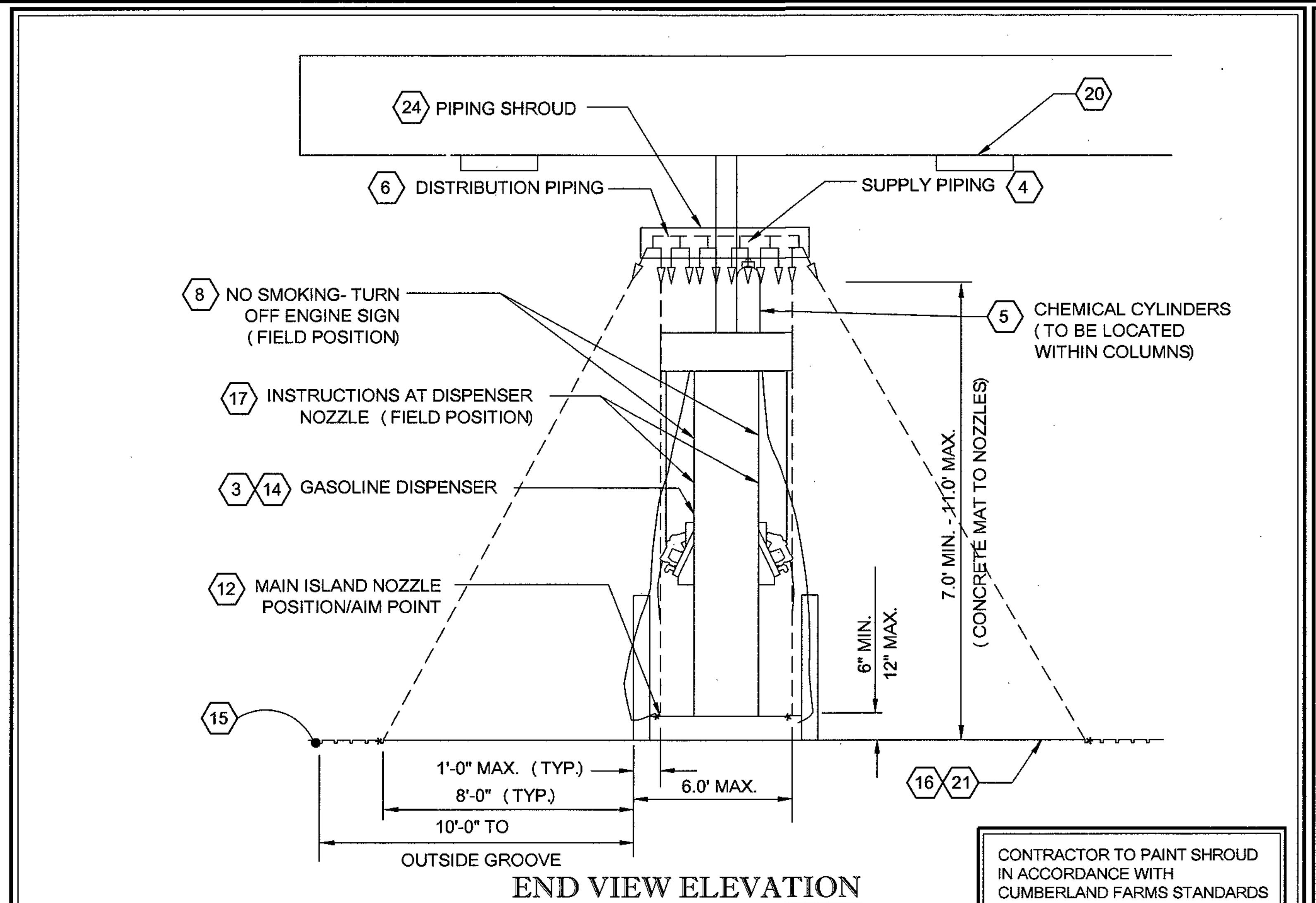
CCTV CAMERAS

LANE #	FULL/SELF SERVE	SELF SERVE	FULL SERVE
LANE #1/2	- -	2	- -

SITE SPECIFIC SYSTEM COMPONENT TABLE *

NUMBER OF SYSTEMS REQ'D	NUMBER OF NOZZLES REQ'D	NUMBER OF CYL. REQ'D	CYLINDER SIZE & QTY.
(1) 24'-6" LONG SYSTEM	(36) PER SYSTEM	(5) PER SYSTEM	ATD-35BC= 1 ATD-75BC= 4
(1) TOTAL SYSTEMS	(36) TOTAL NOZZLES	(5) TOTAL CYLINDERS	ATD-35BC= 1 ATD-75BC= 4

* INCLUDES MAIN AND END OF ISLAND PROTECTION.



END VIEW ELEVATION

NOT TO SCALE

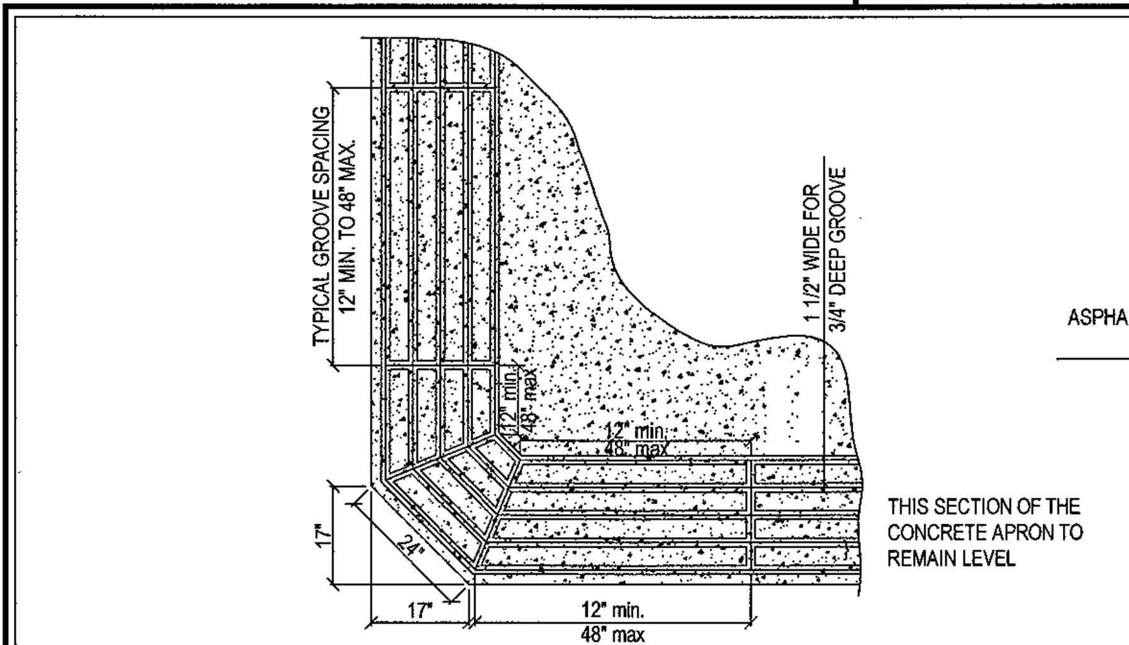
SPECIAL NOTE:

IN THE EVENT OF A CONFLICT BETWEEN THIS DRAWING AND THE UL LISTED PYRO-CHEM INC. "THE ATTENDANT" TECHNICAL MANUAL, THE TECHNICAL MANUAL SHALL GOVERN.

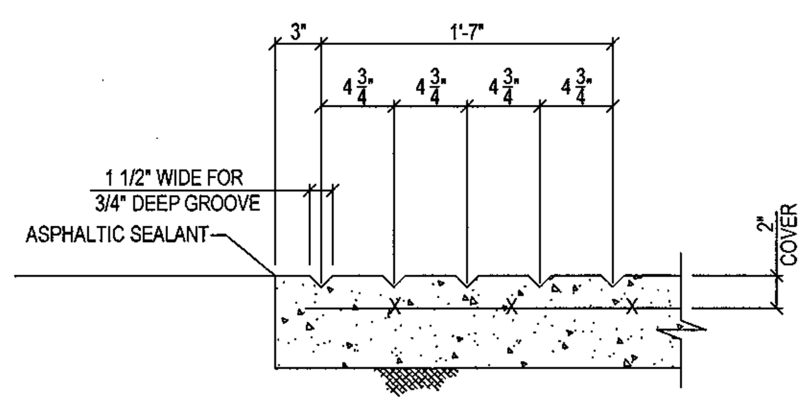
NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICT

SPECIAL INSTALLATION NOTES:

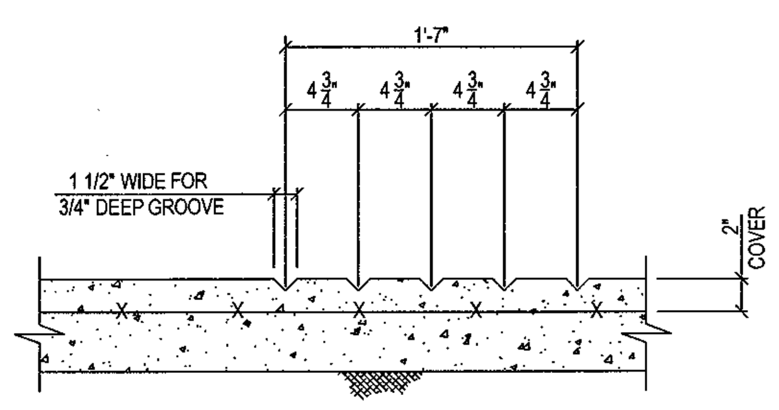
1. DO NOT PAINT THE HEAT SENSORS.
2. PITCH ELECTRICAL CONDUIT AWAY FROM THE ELECTRICAL JUNCTION BOXES.
3. ALL CONDUIT RUNS AND JUNCTION BOXES ARE TO BE SECURED TO THE TOP OF THE PURLINS AS DETAILED ON THIS DRAWING.
4. ALL RIGID METAL CONDUIT THREADS TO BE SEALED USING TEFLON PASTE FOR WATERTIGHT INSTALLATION.



TYPICAL APRON CORNER AND GROOVE SPACING DETAIL



V-GROOVE EDGE OF SLAB SECTION



V-GROOVE INNER SLAB SECTION

NOTES:

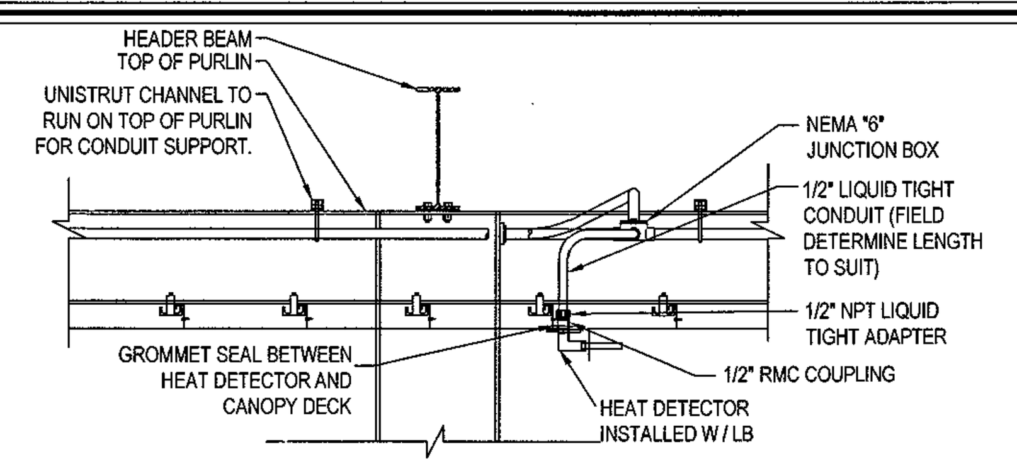
1. THE POSITIVE LIMITING BARRIER TO BE 5 CONTINUOUS "V" GROOVES 1 1/2" WIDE x 3/4" DEEP, ON 4 3/4" CENTERS WITH CROSS INTERCONNECTING GROOVES, EQUALLY SPACED ON MIN. 12" MAX. 48" CENTERS.
2. "V" GROOVES SHALL BE TROWELLED IN CONCRETE SLAB.
3. "V" GROOVES SHALL BE A CONSTANT WIDTH AND DEPTH FOR THE ENTIRE APRON.
4. GROOVES MUST BE KEPT CLEAN OF DIRT AND DEBRIS.

POSITIVE LIMITING BARRIER NOTE:

CONTRACTOR TO VERIFY LOCATION OF POSITIVE LIMITING BARRIER WITH CUMBERLAND FARMS PRIOR TO INSTALLATION.

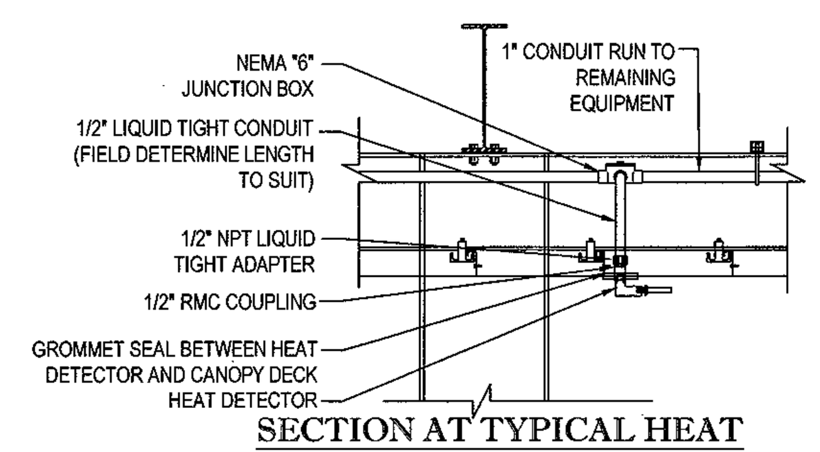
15 POSITIVE LIMITING BARRIER SAWCUTS AND PATTERNS

NOT TO SCALE



TYPICAL SECTION AT MAIN J-BOX

NOT TO SCALE



SECTION AT TYPICAL HEAT DETECTOR LOCATION

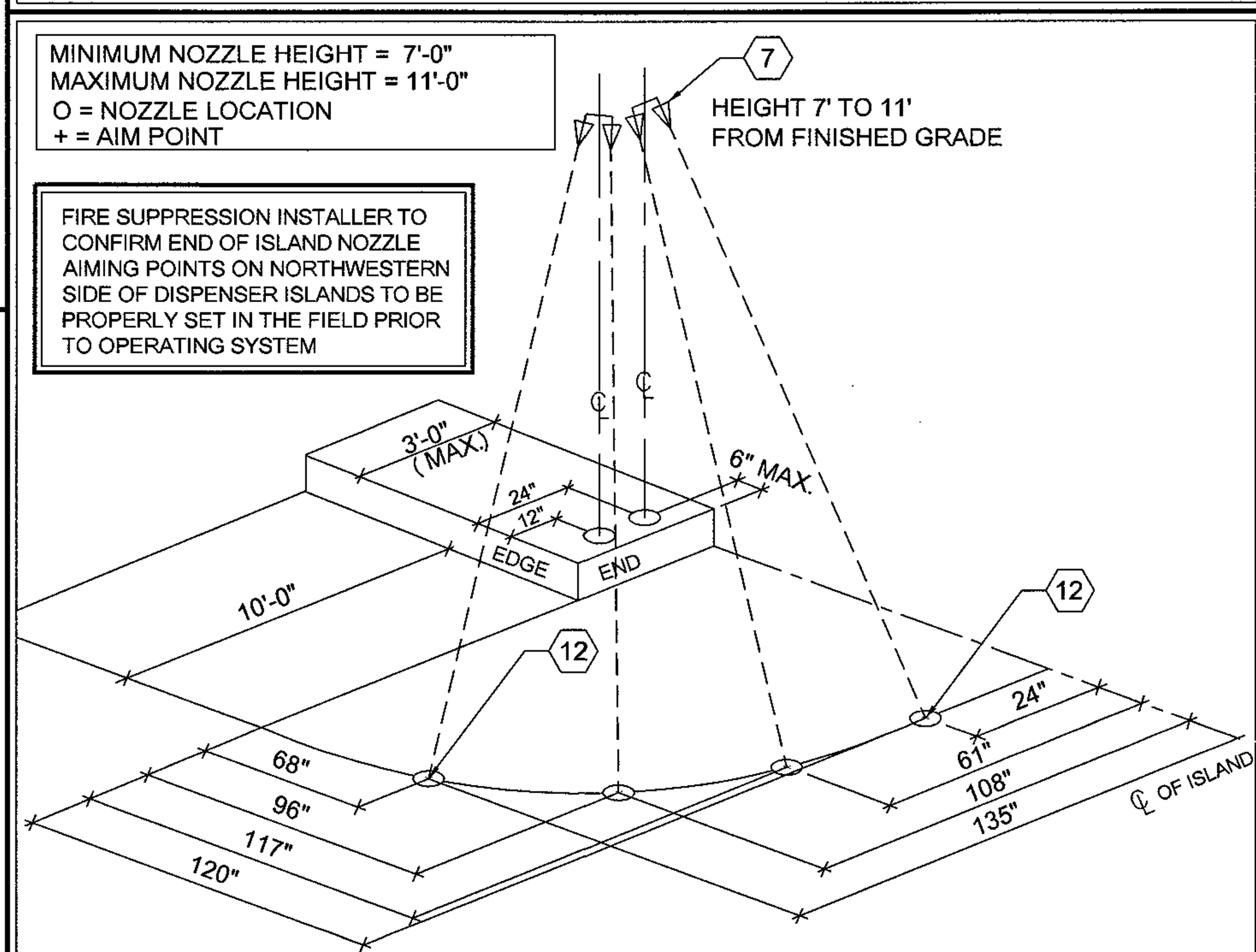
NOT TO SCALE

NOTES:

- ALL RIGID METAL CONDUIT THREADS TO BE SEALED USING TEFLON PASTE FOR WATERTIGHT INSTALLATION.
- LONGER HEAT DETECTOR LEADS MAY BE REQUIRED TO FACILITATE INSTALLATION.
- ALL ELECTRICAL CONNECTIONS FOR HEAT DETECTORS TO BE RESIN PACKED.
- ALL CABLES FOR FIRE SUPPRESSION HEAT DETECTORS AND STROBE ALARM TO BE SHIELDED. USE BELDEN TYPE 8719 CABLE.
- ALL JUNCTION BOXES ARE TO BE MOUNTED A MINIMUM OF 12" ABOVE THE DECK PANS.
- ALL CONDUITS, LIQUID TIGHT, J-BOXES, WIRING AND FINAL CONNECTIONS FOR THE HEAT DETECTORS SHALL BE SUPPLIED AND INSTALLED BY THE GENERAL CONTRACTOR'S ELECTRICIAN.
- ALL HEAT DETECTORS, GROMMET SEALS, LB'S FOR THE HEAT DETECTORS SHALL BE SUPPLIED AND INSTALLED BY THE FIRE SUPPRESSION CONTRACTOR.

MINIMUM NOZZLE HEIGHT = 7'-0"
MAXIMUM NOZZLE HEIGHT = 11'-0"
O = NOZZLE LOCATION
+ = AIM POINT

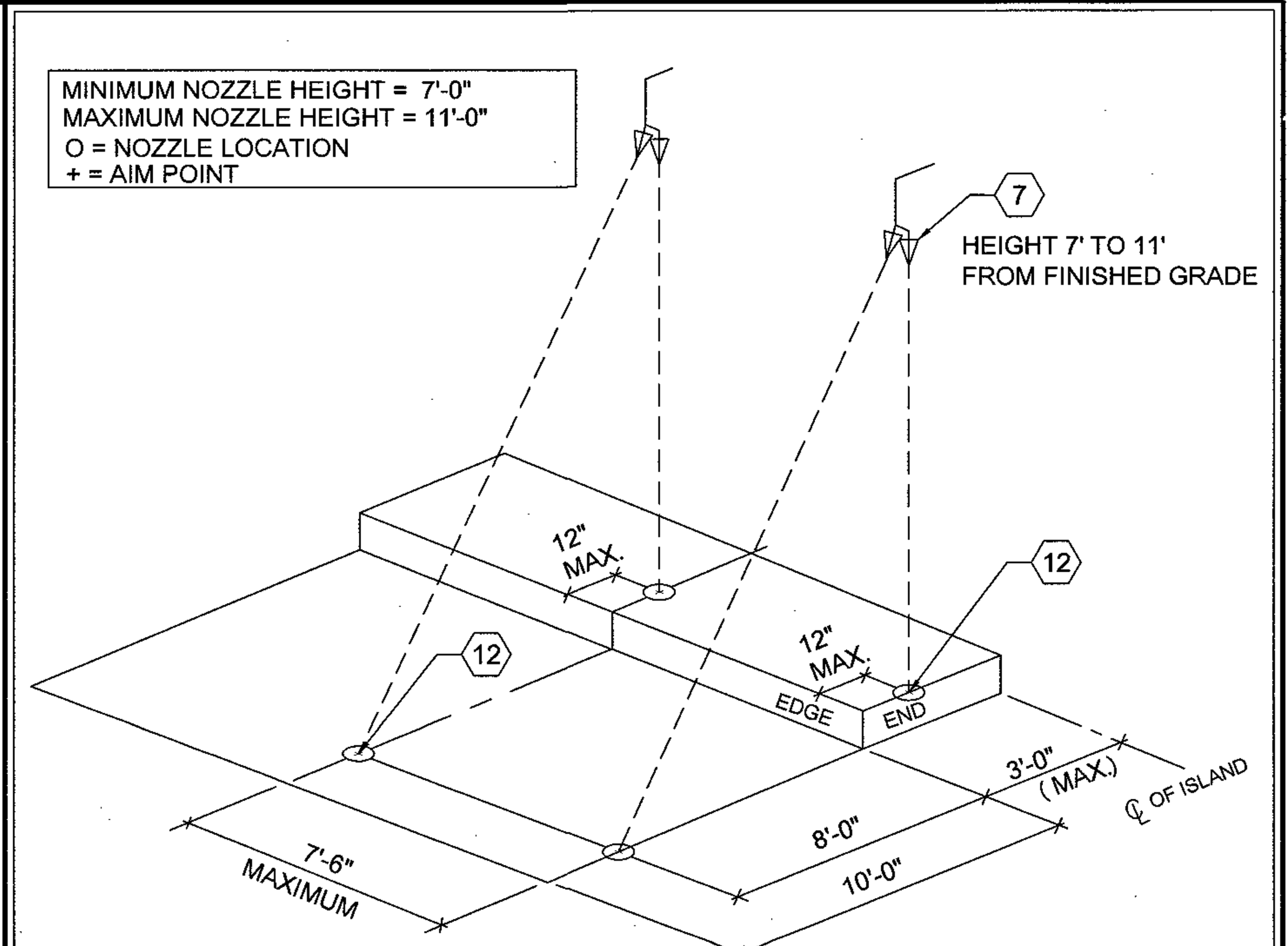
FIRE SUPPRESSION INSTALLER TO CONFIRM END OF ISLAND NOZZLE AIMING POINTS ON NORTHWESTERN SIDE OF DISPENSER ISLANDS TO BE PROPERLY SET IN THE FIELD PRIOR TO OPERATING SYSTEM



END OF ISLAND PROTECTION

SCALE: NONE

MINIMUM NOZZLE HEIGHT = 7'-0"
MAXIMUM NOZZLE HEIGHT = 11'-0"
O = NOZZLE LOCATION
+ = AIM POINT



MAIN ISLAND AREA PROTECTION

SCALE: NONE

WARNING
NO SMOKING-STOP MOTOR

IT IS UNLAWFUL AND DANGEROUS TO DISPENSE GASOLINE INTO UNAPPROVED CONTAINERS.

NO FILLING OF PORTABLE CONTAINERS IN OR ON A MOTOR VEHICLE OR TRAILER. PLACE CONTAINER ON GROUND BEFORE FILLING.

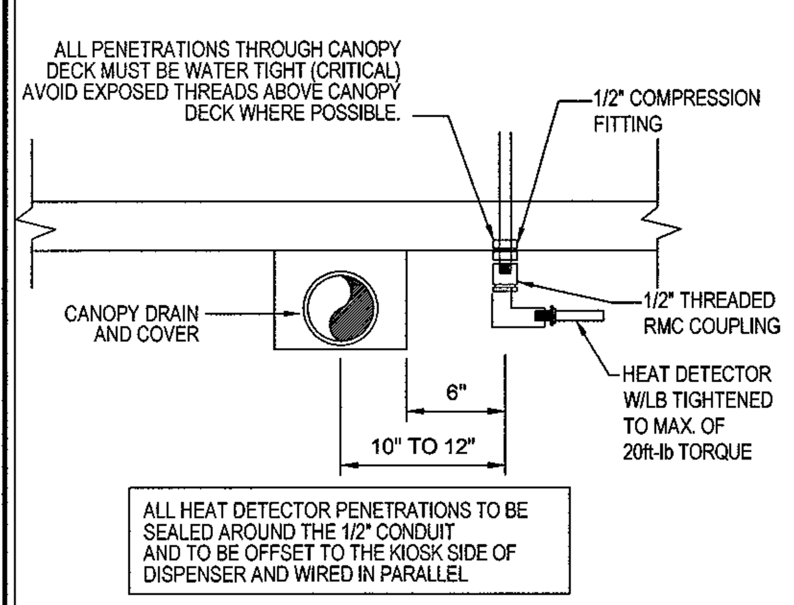
8 NO SMOKING TURN-OFF ENGINE SIGN

NOT TO SCALE

NOTES:

DIMENSIONS 18" BY 26" WHITE BACKGROUND WITH RED MASKING

LETTERING SIZE AND ARRANGEMENT SHALL BE IN BLOCK LETTERS MIN. HEIGHT 2". AS SHOWN TO RIGHT.



TYPICAL HEAT DETECTOR LOCATION

NOT TO SCALE

811 Know what's below. Call before you dig.

1. 190° HIGH TEMP. AUTOMATIC THERMOSTAT INSTALLED ON 15 FOOT MAXIMUM CENTERS INTERCONNECTED TO FIRE SUPPRESSION SYSTEM, CENTER OF EACH ISLAND ABOVE DISPENSERS.
2. CCTV CAMERA MOUNTED TO CANOPY COLUMN AT ISLAND WITH CCTV MONITOR(S) LOCATED NEAR CASH REGISTER AT THE TRANSACTION AREA WITHIN THE BUILDING. CCTV MONITORS SHALL DISPLAY ALL CAMERA ANGLES SIMULTANEOUSLY ON THE SCREEN WITH A MINIMUM PICTURE FRAME OF 5 INCHES BY 6.5 INCHES PER CAMERA.
3. INTERCOM SPEAKERS AT EACH DISPENSER WITH MASTER CONTROL LOCATED AT CENTRAL CONTROL AREA.
4. OVERHEAD FIRE SUPPRESSION PIPING (SUPPLY).
5. DRY CHEMICAL CYLINDERS AS REQUIRED BY MANUFACTURER OF SUPPRESSION SYSTEM WITH REFERENCE TO U/L APPROVED INSTALLATION AND MAINTENANCE MANUAL.
6. OVERHEAD FIRE SUPPRESSION PIPING (DISTRIBUTION).
7. NOZZLE.
8. NO SMOKING AND TURN OFF ENGINE SIGN.
9. GASOLINE DISPENSER CONTROL CONSOLE EQUIPMENT WITH COMPLETE EQUIPMENT SHUTDOWN EMERGENCY MODE U/L APPROVED.
10. HAND OPERATED 40 BC HIGH FLOW FIRE EXTINGUISHER.
11. CONTROL CENTER.
12. FIRE SUPPRESSION STRIKE POINT - FOR END OF ISLAND NOZZLE AIM POINTS REFER TO THE UL LISTED PYRO-CHEM., INC. "THE ATTENDANT", TECHNICAL MANUAL.
13. SUPPORT/COLUMN
14. GASOLINE OR DIESEL DISPENSER U/L APPROVED WITH AUTOMATIC CREDIT CARD READING DEVICE.
15. POSITIVE LIMITING BARRIER AROUND PERIMETER OF SELF SERVE GASOLINE DISPENSING AREA.
16. SELF SERVE GASOLINE DISPENSING AREA.
17. APPROPRIATE INSTRUCTIONS FOR USE AT EACH SELF SERVE DISPENSING NOZZLE.
18. TRAFFIC FLOW ARROWS.
19. SAFETY BARRICADE.
20. LIGHTING WITHIN SELF SERVE DISPENSING AREA.
21. CONCRETE MAT SURROUNDING THE DISPENSING AREA SHALL BE MADE AS LEVEL AS POSSIBLE.
22. FACILITY.
23. MANUAL RELEASE LOCATED IN CONTROL CENTER CONVENIENT TO ATTENDANT. REMOTE RELEASE ENGINEERED BY FACTORY, INSTALLED BY AUTHORIZED FIRE SUPPRESSION CONTRACTOR.

NOTES

NOTES TAKEN FROM MAINE DEPARTMENT OF PUBLIC SAFETY CHAPTER 34 "SPECIAL REGULATIONS FOR ATTENDED SELF-SERVICE GASOLINE FACILITIES" PAGE 3 & 4.

1. NO ONE SHALL CONSTRUCT, RECONSTRUCT, CONVERT OR ALTER ANY SERVICE STATION TO PROVIDE ATTENDED SELF-SERVICE GASOLINE DISPENSING WITHOUT FIRST NOTIFYING THE OFFICE OF THE STATE FIRE MARSHAL IN WRITING OF THE TYPE AND ADDRESS OF THE FACILITY.
2. EVERY GASOLINE SERVICE STATION SHALL BE UNDER THE DIRECT CONTROL OF THE OWNER, OPERATOR OR DULY AUTHORIZED EMPLOYEE WHO SHALL BE ON DUTY AT ALL TIMES THAT GASOLINE IS BEING SOLD OR DISPENSED.
3. EACH FACILITY SHALL BE EQUIPPED WITH A FIXED FIRE EXTINGUISHING SYSTEM INSTALLED IN ACCORDANCE WITH NFPA#30A, CODE FOR MOTOR DISPENSING FACILITIES AND REPAIR GARAGES, 2008 EDITION. THE SYSTEM SHALL PROVIDE PROTECTION FOR ALL PUMPS IN THE DISPENSING AREA. EACH EXTINGUISHER HEAD SHALL BE INSTALLED IN SUCH A MANNER THAT AN ACCUMULATION OF ICE OR SNOW WILL NOT ADVERSELY AFFECT THE PROPER FUNCTIONING OF THE SYSTEM.
4. THE NUMBER OF NOZZLES CAPABLE OF SIMULTANEOUS OPERATION MAY NOT EXCEED SIXTEEN NOZZLES PER OPERATOR ON DUTY IN ISLANDS OPEN TO USE, AND NO MORE THAN EIGHT NOZZLES MAY BE IN USE AT ONE TIME.
5. THE CONTROLLING MECHANISM CONSOLE AND ITS RELATED EQUIPMENT ARE TO BE LISTED BY UNDERWRITERS LABORATORIES.
6. IN ADDITION TO THE REQUIRED OPERATING INSTRUCTIONS SET FORTH IN NFPA #30A, SIGNAGE SHALL INCLUDE A REQUIREMENT THAT THE USER STAY IN VIEW OF THE FUELING NOZZLE DURING DISPENSING.
7. THE CONTROLLING CONSOLE PROVIDING POWER TO THE PUMP MOTOR MUST BE MONITORED BY THE OWNER, OPERATOR OR DULY AUTHORIZED EMPLOYEE AT ALL TIMES WITH GASOLINE IS BEING DISPENSED AND PROPERLY PROTECTED AGAINST PHYSICAL DAMAGE FROM MOTOR VEHICLES.
8. THERE SHALL BE CONSTANT CONTACT BY THE CONTROL CONSOLE OPERATOR AND THE PUMP ISLAND BY MEANS OF INTER-COMMUNICATION SYSTEM THAT SHALL BE MAINTAINED IN PROPER OPERATING CONDITIONS.
9. THE CONTROL CONSOLE OPERATOR MUST OBSERVE THE FILLING OPERATION OF EACH VEHICLE. MIRRORS ARE NOT ACCEPTABLE AS PROVIDING ADEQUATE VISUAL CONTROL.
10. THE PRIMARY FIRE DEPARTMENT HAVING JURISDICTION OR PROVIDING MUTUAL AID IN THE AREA IN THE AREA IN WHICH A PROPOSED SELF-SERVICE STATION IS TO BE LOCATED SHALL BE INFORMED OF SUCH PROPOSAL AND THE REQUIREMENTS OF ALL LOCAL ORDINANCE MUST BE MET.
11. THE OPERATIONS PERMIT MUST BE POSTED IN THE PLAIN VIEW OF THE PUBLIC, UNOBSTRUCTED, AT THE SITE.
12. AN AUTOMATIC-CLOSING TYPE HOSE NOZZLE VALVE LISTED WITH UNITED LABORATORIES (OR OTHER RECOGNIZED AGENCY APPLYING AN EQUIVALENT TEST) WITH LATCH-OPEN DEVICE MAY BE INSTALLED.
13. THE OWNER OR OPERATOR OF ANY ATTENDED SELF-SERVICE FACILITY EXISTING PRIOR TO THE DATE OF THIS RULE MUST NOTIFY THE OFFICE OF THE STATE FIRE MARSHALL IN WRITING OF BY JULY 1, 2006.

I ______________________ CHIEF OF DEPARTMENT OR HIS DESIGNEE, HAVE REVIEWED THE ATTACHED INFORMATION AND HAVE ACKNOWLEDGMENT OF.

CITY/TOWN: ______________________

DATE: ______________________

FIRE SUPPRESSION NOTES:

1. FIRE SUPPRESSION SYSTEM AND ASSOCIATED COMPONENTS SHALL BE INSTALLED BY A LICENSED FIRE SUPPRESSION SYSTEM INSTALLER CERTIFIED FOR SUCH INSTALLATION BY THE SYSTEM MANUFACTURER.
2. THE PROPOSED FIRE SUPPRESSION SYSTEM AND SYSTEM COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS. INSTALLATION OF THIS SYSTEM SHALL CONFORM TO THE REQUIREMENTS OF THE SYSTEM MANUFACTURER, THE PORTLAND FIRE DEPARTMENT, AND ALSO THE MAINE STATE FIRE MARSHAL'S OFFICE REQUIREMENTS.
3. SYSTEM INSTALLER IS RESPONSIBLE FOR REVIEWING THIS PLAN FOR COMPLIANCE WITH THE REQUIREMENTS OF THE SYSTEM MANUFACTURER PRIOR TO INSTALLATION. IT IS THE INSTALLERS RESPONSIBILITY TO NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY CONFLICTS. FAILURE TO NOTIFY THE ENGINEER OF RECORD SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS.
4. THIS PLAN WAS PREPARED USING THE SYSTEM MANUFACTURERS GUIDELINES AND IS INTENDED FOR GENERAL LAYOUT PURPOSES ONLY.

GENERAL NOTES:

1. THE ELECTRICAL THERMOSTAT DETECTORS SHALL BE MOUNTED ON THE CANOPY'S UNDERSURFACE, PROVIDED THE HEIGHT DOES NOT EXCEED 15 FEET ABOVE THE CONCRETE MAT OR ON THE UNDERSIDE OF AN 18"X18"X2" HEAT COLLECTOR AND NO HIGHER THAN THE NOZZLES.
2. IN THE EVENT THAT A CANOPY SUPPORT BEAM INTERFERES WITH INSTALLING THE HEAT DETECTOR ALONG THE CENTER OF THE ISLAND, THEN THE DETECTORS MAY BE OFFSET NO MORE THAN 12" TO CLEAR THE BEAM. IF THE BEAM EXTENDS BELOW THE FLAT CANOPY DECK, THEN AN ADDITIONAL DETECTOR MUST BE ADDED AT EACH AFFECTED LOCATION (A DETECTOR ON EACH SIDE OF THE PROTRUDING BEAM).
3. NOZZLE AND HOSE FROM EACH PETROLEUM PRODUCT DISPENSER SHALL NOT EXTEND BEYOND POSITIVE LIMITING BARRIER AND NO PETROLEUM PRODUCT SHALL BE DISPENSED BEYOND POSITIVE LIMITING BARRIER.

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REVISIONS

REV	DATE	COMMENT	BY
1			
2			
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PERMIT PLAN

PROJECT No.:	W041623
DRAWN BY:	BLC
CHECKED BY:	SJM/LMD
DATE:	05/22/17
SCALE:	AS NOTED
CAD I.D.:	PORTLAND fs0

PROJECT:

FIRE SUPPRESSION PLAN FOR CUMBERLAND FARMS

(NEW SITE)

1136 FOREST AVE
CITY OF PORTLAND
CUMBERLAND COUNTY
MAINE

BOHLER ENGINEERING
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
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SHEET TITLE:

PYRO-CHEM, INC. "THE ATTENDANT" GASOLINE FIRE SUPPRESSION SYSTEM

SHEET NUMBER:

CFG11.0

REV 0 - 05/22/2017